

# ARDEX K 10™

# Reactivatable, High Flow, Self Leveling Underlayment

Long healing time - up to 25 minutes when installed with a spiked roller

Choose Reactivatable™

Self-levels up to 1"

Pourable or pumpable



Seeks its own level and provides a durable, flat, smooth floor surface with minimum labor







# ARDEX K 10

### Reactivatable, High Flow, Self Leveling Underlayment

#### **Suitable Substrates**

- Concrete (structurally sound)
- Absorbent terrazzo on concrete†
- Properly installed ARDEX moisture control systems on concrete:
  - ARDEX MC™ RAPID
  - ARDEX VB 100™
- Other approved, non-porous materials on concrete†:
  - o Non-porous (non-absorbent) cementitious terrazzo
  - o Ceramic, quarry or porcelain tiles
  - o Epoxy Coatings
  - Epoxy terrazzo
  - o Non-Water-Soluble Adhesive Residue on Concrete
  - Concrete treated with certain curing compounds (test area only; for full instructions, see

ardexamericas.com/services/properprep)

†Must be sound, solid and well-bonded to underlying, structurally sound substrates.

### **Suitable Applications**

- · Dry areas only
- Interior applications only
- Areas to receive a suitable floor covering material, such as carpet, vinyl, ceramic, etc. Do not use as a wear surface.
   If a permanent wear surface is needed, use ARDEX SD-T.

#### **Job Conditions**

During installation and cure, substrate and ambient temperatures must be a minimum of  $50^{\circ}$  F /  $10^{\circ}$  C.

### **Step 1: Moisture Evaluation and Testing**

This product is intended for interior, dry spaces. Hydrostatic pressure, plumbing leaks, flood factors and other sources of water infiltration must be identified and corrected prior to installation. This product is not a vapor barrier and will allow free passage of moisture vapor.

Test concrete in accordance with ASTM F2170.

For high-moisture floor coverings and adhesives, this product can be installed over concrete with relative humidity (RH) levels up to 99% provided: Each on-ground slab is built on a vapor retarder, which remains effective and intact, in conformance with ASTM E1745.

All other cases: Moisture control is required if the RH exceeds the most stringent of the following: 1) the limitations imposed by the flooring manufacturer; 2) the limitations imposed by the adhesive manufacturer.

If moisture control is required, see "Moisture Control System Selection" section below. If moisture control is not required, see the "Priming Method Selection" section below.

### **Moisture Control System Selection**

ARDEX MC RAPID or ARDEX VB 100

If moisture control is not required, choose the appropriate primer in accordance with the next section.

### Priming Method Selection (If moisture control is not required)

- ARDEX P 51<sup>™</sup> Primer
- ARDEX P 82 ™ Ultra Prime
- ARDEX P 4<sup>™</sup> Pre-Mixed, Rapid-Drying, Multipurpose Primer

Substrate (Dry areas only Interior applications only; All grade levels)	Porosity	Priming Course
		ARDEX P 51 1:1 or ARDEX P 4
		ARDEX P 82 or ARDEX P 4
	,	ARDEX P 51 "Double prime" or ARDEX P 4
Other approved, non-porous materials on concrete (See section entitled "Suitable Substrates" above.)		ARDEX P 82 (All) or ARDEX P 4 (All except adhesive residue)

### Step 2: Substrate Preparation (Proper Prep™)

For full details on Proper Prep, reference the following articles at <u>ardexamericas.com/services/properprep</u>:

- Article 1: Preparing Concrete for Bonded ARDEX or HENRY Applications
- Article 1.1: Preparing Concrete for ARDEX Underlayments
- Proper Prep Brochure

If necessary, mechanically clean the substrate by shot blasting or similar means. Do not use acid etching, adhesive removers, solvents or sweeping compounds, as these are bond breakers. Sanding is not an effective method to remove contaminants from concrete.

Substrate must be dry and free of excess moisture and alkali. All substrates must be sound, solid and thoroughly clean of all bond-breaking contaminants, including but not limited to: overwatered or otherwise loose or weak material; dirt, dust, wax, grease, paints and oils; unapproved curing compounds and sealers; unsuitable adhesive residues; all existing patching and leveling materials.

#### **Minimum Preparation**

Depending on the selected priming course, additional prep may be needed, as follows:

Primer	Minimum Preparation
ARDEX P 4	Substrate must be clean
ARDEX P 51 1:1	Substrate must be clean and absorbent
ardex p 82	Substrate must be clean and not absorbent.
ARDEX MC RAPID	Mechanically remove all adhesive residue, sealers, curing compounds, tiles, mortars and epoxy coatings down to clean, sound, solid concrete / terrazzo. Concrete and terrazzo substrates must be clean and prepared to a minimum CSP 3 / maximum CSP 5 (icri.org).

Following preparation, thoroughly vacuum to remove all excess dirt and debris.

Handle and dispose of asbestos and other hazardous materials in accordance with prevailing regulations, which supersede the recommendations in this document.

### **Step 3: Treating Joints and Cracks**

All moving joints, including expansion joints and isolation joints, as well as all moving cracks, must be honored up through the entire flooring system, including the finishing course. Under no circumstances should this product, the moisture control system, the selected primer or any other component of the flooring system be installed over these.

Dormant control joints and Dormant cracks may be prefilled; however, this filling is not intended to act as a repair method that will eliminate the possibility of telegraphing. Non-structural materials are unable to restrain movement within a concrete slab. 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.

If an ARDEX moisture control system will be installed (see "Moisture Testing" section above): All dormant joints and dormant cracks greater than a hairline (1/32"/ 0.8 mm) that will not be honored must be pre-filled with ARDEX ARDIFIX™ Low Viscosity Rigid Polyurethane Crack and Joint Repair and sand broadcasted to refusal in strict accordance with the technical data sheet.

## **Step 4: Install Appropriate Moisture Control or Priming Course**

Products may need longer drying times with low surface temperatures and/or high ambient humidity. Do not proceed with subsequent steps before product has dried thoroughly.

### Moisture Control System Installation (Priming course if moisture control is required)

If moisture control is required, install the ARDEX moisture control system in accordance with the appropriate technical data sheet (<a href="www.ardexamericas.com/products">www.ardexamericas.com/products</a>). See section entitled "Moisture Evaluation and Testing" above.

#### Priming (If moisture control is not required)

See section entitled Priming Method Selection above to select the appropriate primer based on the substrate.

### Standard absorbent (porous) Concrete: ARDEX P 51 Mixed 1:1

Dilute primer with water at a rate of 1:1 by volume. Apply evenly with a clean, soft-bristled push broom. Do not use paint rollers, mops or spray equipment. Do not leave bare spots. Brush off puddles and excess primer.

It is critical to ensure that the primer is dry prior to proceeding with the next installation step. To determine if the primer is dry after a minimum of 30 minutes (max. 24 hours), pour water onto the surface of the primer in several areas and rub it with your finger. If the water remains clear, the primer is dry. If the water turns cloudy or milky, additional drying time is needed.

### Extremely absorbent concrete: ARDEX P 51 "Double prime"

Make an initial application of primer diluted with 3 parts water by volume. Let the initial application dry thoroughly (1 - 3 hours), and then install a second application of primer mixed 1:1 with water as detailed directly above.

### Non-absorbent (non-porous; burnished) Substrates: ARDEX P 82

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. Back roll with a dry roller to remove excess primer. ARDEX P 82 should be applied within 1 hour of mixing. Allow to dry to a thin, slightly tacky film (min. 3 hours, max. 24 hours).

### Various, Approved Substrates: ARDEX P 4

Apply a thin, even layer to the substrate using a short-nap roller, sponge paint roller or paintbrush. Allow the primer to dry to a thin, opaque, white film (min. 30 minutes; 70°F / 21°C). Once dry, there is no time limit before the subsequent installation may proceed. However, please note that the subsequent installation should proceed as soon as possible to avoid surface contamination or damage to the primed surface.

### Step 5: Mixing and Application

#### **Recommended Tools**

ARDEX T-1 Mixing Paddle; Mixing Container; 1/2" (12 mm) heavy-duty drill (min. 650 rpm); appropriate measuring bucket; ARDEX T-4 Spreader; ARDEX T-5 Smoother; cleated athletic shoes with non-metallic spikes; ARDEX T-6 Spiked Roller

### **Safety and OSHA Compliance**

Handle each bag with care, emptying it in a manner that avoids creating a plume of dust. While mixing, use a standard "gutter hook" vacuum attachment in combination with a heavy-duty, bucket-style vacuum (Shop-Vac or similar) and HEPA dust extraction vacuum system.

### **Application Data**

Water Ratio:	5 or 5 1/4 quarts (4.73 - 4.97 L) clean	
	water Per bag	
Flow time (ARDEX T-4	10 - 20 minutes (70°F / 21°C)	
Spreader and ARDEX T-5		
Smoother):		
Flow time (ARDEX T-6	Up to 25 minutes (70°F / 21°C)	
Spiked Roller)		

### **Thickness of Application**

### **Maximum Thickness of Application**

Application	Maximum Thickness of Application
Over ARDEX VB 100	1/4" (6 mm)
Over substrates primed with ARDEX P 82 or ARDEX P 4	1/2" (12 mm)
All other cases	1/2" (12.7 mm) At 5 1/4 quarts Water Ratio 1" (25.4 mm) 1/2" (12.7 mm) At 5 quarts Water Ratio

### Average minimum thickness: 1/8" (3 mm)

1/16" (3 mm) minimum over highest point on the floor will typically result in average minimum thickness of at least 1/8" (3 mm).

To match existing elevations, product can be tapered to as thin an application as the sand in the material will allow. If a true featheredge is needed for transitions, use ARDEX FEATHER FINISH or similar in accordance with the technical data sheet at <a href="https://www.ardexamericas.com">www.ardexamericas.com</a>.

### Manual

Mix two bags at a time. Pour the water in the mixing container first, and then add powder while mixing with the mixing paddle and a 1/2" (12 mm) heavy-duty drill (min. 650 rpm). Mix thoroughly for approximately 2 to 3 minutes to obtain a lump-free mix. Do not overwater! Additional water will weaken the compound and lower its strength. Yellowish foam while mixing, or settling of the sand aggregate while placing, indicates overwatering.

Pour the mix onto the floor. Spread with spreader. Immediately smooth the material with the smoother, or spike roll the material with the spiked roller. Work in a continuous manner during the entire self-leveling installation. Wear cleated athletic shoes with non-metallic spikes to avoid leaving marks in the liquid.

### Reactivating

After 10 - 20 minutes, product will start to set. However, product is reactivatable and can maintain its healing properties for up to 25 minutes, depending on jobsite conditions. To reactivate, move the ARDEX T-6 Spiked Roller through the material in a consistent motion.

Where thicker applications are needed: ARDEX K  $13^{\text{TM}}$  Premium Self Leveling Underlayment

Reference the appropriate technical data sheet for suitable substrates and recommendations for substrate preparation and priming.

### **Pumping**

Product may be pumped using ARDIFLO™ Automatic Mixing Pumps. ARDIFLO Pumps provide high productivity and smooth, consistent installations. Pumps may be rented from an authorized ARDEX Distributor. Please contact the ARDEX Technical Service Department with regard to pumping.

### Step 6: Drying Time and Installation of Flooring

All dry times are calculated at  $70^{\circ}F$  ( $21^{\circ}C$ ). Drying time is a function of jobsite temperature and humidity conditions. 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 product prematurely and is not recommended.

	Thickness of Application	
	≤ 3/8" (9 mm)	>3/8" (9 mm)
Walkable:	2-3 hours	2-3 hours
Moisture-insensitive tile	6 hours	6 hours
(ceramic, quarry, porcelain):		
Carpet, vinyl sheet, vinyl tile,	24 hours	Mat test++
vinyl plank, rubber, linoleum:		
All other cases:	Mat test++	Mat test++

††Mat test: Allow the installation to dry a minimum of 24 hours prior to mat testing in accordance with ASTM D4263. To do this, place 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**

Intended for use by professional contractors who are trained in the application of this product and/or similar products. Not sold by ARDEX through home improvement centers. For information on ARDEX Academy trainings, visit ardexamericas.com. Never mix with cement or additives outside of our written recommendations. In accordance with industry standards, and to determine the suitability of the products for the intended use, always install an adequate number of properly located test areas including the finish flooring. 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.

Observe the basic rules of concrete work, including the minimum surface and air temperatures detailed above. Install quickly if the substrate is warm, and follow the warm weather installation guidelines available on our website.

Dispose of packaging and residue in accordance with prevailing regulations. Do not flush material down drains. Do not reuse packaging.

### **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 Manufacturer Ouality Standards

Physical properties are typical values and not specifications. All data based on a partial, in-lab mix. Mixing and Testing completed at 70°F / 21°C and in accordance with ASTM C1708, as applicable.

Coverage:	Per bag At 1/4" (6 mm): 25 sq. ft. (2.3 m <sup>2</sup> ) Per bag At 1/8" (3 mm): 50 sq. ft. (4.6 m <sup>2</sup> ) Dependent on surface profile, density and
Maximum Thickness of Application:	Up to 1" (7.6 cm); See section entitled "Thickness of Application" above.
Compressive Strength (ASTM C109/mod – Air cure only)):	4,700 psi (33 MPa; 330 kg/cm²) At 28 days
Flexural Strength (ASTM C348):	1,000 psi (7 MPa; 70 kg/cm²) At 28 days
Drying Time:	24 hours (most floor coverings) See section entitled "Drying Time and Installation of Flooring" above.
VOC:	0
Packaging:	50 lb. (22.7 kg) bag
Storage:	Store in a cool, dry area. Do not leave units exposed to sun.
Shelf Life:	12 months, if unopened and properly stored
Warranty:	ARDEX L.P. Standard Limited Warranty applies. Also eligible for ARDEX/HENRY SystemOne™ Warranty when used in conjunction with select HENRY Flooring Adhesives. For full warranty details: <a href="mailto:ardexamericas.com/services/warranties">ardexamericas.com/services/warranties</a> .

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