ARDEX K 530
Decorative Concrete Topping

Resurface indoor concrete and certain non-porous surfaces

Walkable in 2-3 hours, seal in as little as 24 hours

Polish in as little as 24 hours

Natural White color

For use as a binder for custom aggregate and colorants

Use for interior floors only

ARDEX K 530

Decorative Concrete Topping

Suitable Substrates

- Concrete (structurally sound)
- Absorbent terrazzo on concrete[1] (Contact the ARDEX Technical Service Department before proceeding further)
- Properly installed ARDEX moisture control systems on concrete: ARDEX MC RAPID
- Other approved, non-porous materials on concrete[1] (Contact the ARDEX Technical Service Department before proceeding further):
  - o Ceramic, quarry or porcelain tiles[2]
  - o Non-porous (non-absorbent) cementitious terrazzo
  - o Epoxy terrazzo
  - o Epoxy coatings

[1]Must be sound, solid and well-bonded to underlying, structurally sound substrates. It is the responsibility of the installation contractor to ensure the substrate is rigid, well supported, properly anchored and free of undue flex and vibration.

[2]Not suitable for polished applications.

Suitable Applications

- All grade levels
- Dry areas only; Interior applications only
- Areas to receive foot and/or moderate, rubber-wheeled forklift traffic and similar*
- For applications in heavy-duty manufacturing, industrial floors or chemical environments requiring customized industrial coatings, always use the system in conjunction with a sealer suitable for the installation environment.

[3]Excessive service conditions such as and similar to the following will cause gouging and indentations:

- Steel- or hard plastic-wheeled traffic
- Dragging heavy metal equipment, loaded pallets with protruding nails, heavy furniture and/or fixtures over the floor

Jobsite Conditions

During installation and cure, substrate and ambient temperatures must be a minimum of 50° F / 10° C. If installing over an in-floor heating system, turn the heating system off 48 hours before, during and at least 48 hours after completion of the installation.

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 relative humidity (RH) in accordance with ASTM F2170. Moisture control is required If the RH exceeds The limitations associated with the sealer or coating or 85%.

For moisture control, use ARDEX MC RAPID. All other cases: See section entitled "Priming Method Selection" Below.

Priming Method Selection[4]

- ARDEX P 51
- ARDEX EP 2000
- ARDEX MC RAPID (primer application)

Substrate (Dry areas only; Interior applications only; All grade levels)	Primer
Non-porous (non-absorbent) cementitious terrazzo; Ceramic, quarry or porcelain tiles Epoxy terrazzo; Epoxy coatings	ARDEX EP 2000
Standard absorbent (porous) Concrete; Aesthetically critical areas[4]	ARDEX EP 2000; ARDEX MC RAPID (primer application)
Standard absorbent (porous); warehouses and other non-aesthetic areas	ARDEX P 51 1:1; ARDEX EP 2000; ARDEX MC RAPID (primer application)
Extremely absorbent concrete; warehouses and other non-aesthetic areas	ARDEX P 51 Double prime ARDEX EP 2000; ARDEX MC RAPID (primer application)

[4]ARDEX EP 2000 and ARDEX MC RAPID are highly reactive epoxies that bond tenaciously to the substrate to minimize cracking in ARDEX toppings. Follow mixing and application instructions in the appropriate technical data sheet, including sand-broadcast to refusal.

Step 2: Substrate Preparation (Proper Prep™)

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

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

Mechanically clean substrate, if necessary, 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 alkali free. 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; all curing compounds and sealers; and all adhesive residues.

Minimum Preparation

In all cases, substrate must be clean; additional prep may be needed, as follows:

Substrate	Minimum Preparation
Concrete to receive ARDEX MC RAPID or ARDEX EP 2000	Concrete and terrazzo substrates must be clean and prepared to a minimum CSP 3 / maximum CSP 5 (icri.org)
Concrete to receive ARDEX P 51	Substrate must be clean and absorbent (ASTM F3191)
Other approved, non-porous materials on concrete	Must be abraded to facilitate bond.

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

Under no circumstances should any product herein be installed over joints (including control joints, expansion joints, isolation joints, etc.) or moving cracks. Honor all joints and moving cracks.

All 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.

The filling of dormant cracks as described above is recommended to help prevent the cracks from showing through the topping. However, should movement occur, cracks will reappear.

ARDEX cannot be responsible for problems that arise from joints, existing cracks or new cracks that may develop after the system has been installed.

Step 4: Install Appropriate Moisture Control or Priming Course

Note: 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.

ARDEX MC RAPID Installation (If / as needed)

Install the ARDEX moisture control system in accordance with the appropriate technical data sheet: (www.ardexamericas.com/products).

Priming (If moisture control will not be installed)

ARDEX EP 2000 or ARDEX MC RAPID (primer application)

Mix and apply the selected epoxy as directed in the technical data sheet. While the epoxy is fresh, immediately broadcast fine sand to refusal. Once the epoxy is cured, all excess sand must be collected and removed. Vacuum remaining sand using a heavy-duty, bucket-style (Shop-Vac-style) vacuum and HEPA dust extraction vacuum system.

Standard absorbent (porous) Concrete; warehouses and other non-aesthetic areas: 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.

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

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

Mixing Ratios

Heavy traffic / heavy loads (rolling or static):	2 quarts (1.89 L) ARDEX E 25[5] + 4.5 quarts (4.25 L) clean water Per bag
Light / normal traffic:	5 quarts (4.75 L) clean water Per bag

[5]The addition of ARDEX E 25™ Resilient Emulsion is required to increase the resiliency. Follow the mixing instructions below, adding the ARDEX E 25 after adding the water to the mixing container.

Flow time

10 minutes (70°F / 21°C)

Thickness of Application

Maximum Thickness of Application

- 1" (2.5 cm) Neat
- 3" (7.5 cm) with aggregate

Average minimum thickness[6]

- Sealed: 1/4" (6 mm)
- Polished: 3/8" (9.5 mm)

[6]1/8" minimum over highest point on the floor will typically result in average minimum thickness of at least 1/4". 3/16" minimum over highest point on the floor will typically result in average minimum thickness of at least 3/8".

Manual Installation

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.

Adding Integral Colorant and/or Decorative Aggregates

Product can be mixed with the addition of integral pigments. Pigments (liquid or powder) should be added to the water and mixed per the color manufacturer recommendation. NOTE: Installer must conduct test areas using the colorant and ensure color consistency is maintained. ARDEX is not responsible for the final color of the surface.

Product can be mixed with decorative aggregates that meet ASTM C33/C33M or C330/C330M standards. Broadcast Aggregate: Quartz, Granite, Marble, Limestone, River Gravel; Angular / Smooth / Flat; Size 00 up to 3/8". Pre-Consumer Glass (colored) or Mirror with a non-reactive coating; Angular, Smooth, Flat; Size 00 up to 3/8". All aggregates must be Clean; Washed/ Dry and Dust Free. Aggregate loads should not exceed a ratio of 1:1 by weight. Minimum depth should be 1/2" or 3x the size of the largest aggregates value (3/8" aggregate = 1 1/2" minimum depth), whichever is greater. NOTE: Installer must conduct a fully processed test area using the aggregate prior to a full installation. ARDEX is not responsible for the final color, dispersion of aggregate or final color of the finished surface.

Aggregate Extension (as needed)

Extend the product with aggregate as desired / required (see "Thickness of Application" section above) as follows:

1. Select washed and well-graded pea gravel that is no larger than 1/3 the depth of the intended pour and no smaller than 1/8". Do not use sand.

2. Mix with water first, and then add 1 part by volume of the selected pea gravel, mixing until the aggregate is completely coated.

3. Note that the addition of aggregate will diminish the workability of the product and may make it necessary to install a neat coat.

4. Prior to installing a neat coat as detailed above, allow the initial application to dry as detailed in "Drying Time" section below, and prime the initial application with ARDEX P 51 mixed 1:1 (see "Priming" section above).

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 and Sealing / Coating

Product must be sealed or coated with a material suitable for the intended operating conditions of the installation environment. Observe minimum profiles / maximum grit levels specified by the sealer / coating manufacturer. All dry times are calculated at 70°F (21°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.

High-build coatings at 1/8" or greater	7 days; Shot blast and deep vacuum the surface prior to coating application.
Any coating at a thickness exceeding 20 mils	7 days
Solvent-borne or 100% solids coating at a thickness up to 20 mils	48 hours
Polished	With ARDEX E 25 added: 48 hours
	All other cases: When hardened and dried to a uniform tonality (Minimum 24 hours)
ARDEX CG or other waterborne sealer at a thickness up to 20 mils	When hardened and dried to a uniform tonality (Minimum 24 hours)
Walkable	With ARDEX E 25 added: 24 hours All other cases: 2 - 3 hours

For instructions regarding the polishing, treatment and sealing of your polished concrete floor, please refer to the Formatted Specification for ARDEX Surfaces or ARDEX APCS on the corresponding product page at ardexamericas.com. If a pinhole filler is required, ARDEX SD-M™ Designer Floor Finish™ can be used in accordance with the instructions in its technical data sheet.