

ARDEX CD[™] Concrete Dressing

Portland cement-based concrete surface treatment
Resurface worn and spalled concrete to provide
a "new concrete" finish
Easy to apply
Hardens quickly
Freeze-thaw resistant
Suitable for foot and rubber tire traffic on

Use for interior and exterior floors and walls

commercial and residential applications

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ARDEX CD[™]

Concrete Dressing

Description and Usage

ARDEX CD™ is a Portland cement-based concrete resurfacing compound modified with high-performance polymers for exceptional bond strength. Use ARDEX CD over the surface of existing concrete to produce a new wear layer, as well as to fill in small surface defects such as spalls and gouges. Ideal for sidewalks, patios, plazas, courtyards, walkways, driveways, parking garages, pool decks and most vertical concrete surfaces. When mixed with water, the result is a creamy, smooth, slurry consistency that can be applied by trowel, squeegee or hopper gun. Once applied, ARDEX CD can be broom textured before it sets for a reduced-slip surface.

Substrate Preparation

All concrete substrates must be structurally sound, solid, thoroughly clean and free of any form release, sealers or paints, patching compounds, dust, dirt, oils and any other contaminant that could act as a bond breaker. If necessary, mechanically clean the floor down to sound, solid concrete by shot blasting, sandblasting, scarifying or grinding. High-pressure (5000 psi) power washing may also be used to remove contaminants and weak surfaces, though the concrete must then be allowed to dry thoroughly before proceeding. Overwatered, 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 of cleaning the substrate. The use of sanding equipment is not an effective method to remove curing and sealing compounds. Clean debris out of expansion joints and tape or mask the joints off to prevent ARDEX CD from filling the joint. Use a lawn edger to clean around the walk or driveway, as well as around planter boxes and landscaped areas. Substrates must be dry for a successful installation. Substrate and ambient temperatures must be a minimum of 50°F (10°C) for the installation of ARDEX products. For further information, please refer to the ARDEX Substrate Preparation Brochure.

Cracks and Saw-Cut Joints

ARDEX recommends the use of a rigid, two part epoxy crack and joint filler. Use the epoxy to fill non-moving (dormant) cracks greater than a hairline in width (1/32") in existing concrete surfaces. The epoxy should be installed in strict accordance with the installation instructions provided by the epoxy manufacturer. The filling of dormant cracks as described above is recommended to help prevent the cracks from showing through the dressing. However, should movement occur, cracks will reappear.

In addition, please note that under no circumstances should ARDEX CD be installed over any moving joints or cracks. All

existing expansion joints, isolation joints, construction joints and control joints (saw-cuts), as well as any moving cracks, must be honored up through the topping. Failure to do so may result in cracking and/or disbonding of the topping. All moving joints and cracks must be honored up through the ARDEX CD by installing a flexible sealing compound specifically designed for use in moving joints, such as ARDEX ARDISEALTM RAPID FAST SETTING FLEXIBLE JOINT SEALANT or similar.

Recommended Tools

Mixing buckets, margin trowel, steel trowel, fine or mediumbristle finishing broom, 3" paintbrush (for edging), squeegee, hopper gun (where required), ARDEX T-2 Ring Mixing Paddle and a 1/2" heavy-duty drill (12 mm, min. 650 rpm).

Priming

No priming is required over standard absorbent concrete. However, to minimize the potential for pinholes forming in ARDEX CD installed over highly absorbent concrete, as well as to increase the working time of the ARDEX CD, the concrete can first be primed with ARDEX CG™ CONCRETE GUARD™ diluted 1:1 with water. Allow the primer coat to dry thoroughly (min. 3 hours depending upon jobsite conditions) and proceed with the installation of ARDEX CD using the normal installation practices outlined below.

Mixing And Application

For one 40 lb (18 kg) bag of ARDEX CD, use 5 quarts (4.75 liters) of clean water. Pour the water in the mixing container first, and then add the ARDEX CD. To mix smaller quantities by hand, use 2.75 parts powder to 1 part of water by volume. **Do not overwater!** Use a margin trowel and mix vigorously for 2 to 3 minutes. For best results, mix with an ARDEX T-2 Ring Mixing Paddle and 1/2" (12 mm) heavy-duty drill. Mix thoroughly to obtain a lump-free consistency.

The pot life of ARDEX CD is approximately 30 minutes at 70°F (21°C). If the product begins to set in the bucket within this time, remix before using. **Do not add more water!** In warm weather, use cold water to extend the working time.

Pour the mix onto an area of concrete and flat trowel, squeegee or broom it onto the surface while applying enough pressure to ensure good dressing-to-concrete contact. Maintain a "wet edge" during installation to help minimize natural color variations that can occur between sections. Immediately apply a light broom-finish to achieve the desired texture, working in areas small enough to permit finishing without walking on the freshly installed dressing. ARDEX CD has a working time of approximately 10 to 15 minutes, depending on jobsite conditions.

On vertical surfaces such as walls or stair faces, trowel, brush or spray the dressing using a hopper gun directly

onto the prepared area. Smooth or brush the material to the desired finish.

For minor patching, filling small holes, gouges or spalls (up to 1" [25 mm] diameter and 1/2" [12 mm] deep), mix 4 parts powder to 1 part water by volume and apply to the prepared surface with a flat steel trowel or putty knife. Repair areas should be allowed to set firmly (30 to 45 min. at 70° F/ 21° C) before applying the finish coat of the dressing. Cool ambient and surface temperatures will slow setting time. For larger or deeper repairs, use ARDEX CPTM CONCRETE PATCH.

Thickness Of Installation

ARDEX CD is to be installed in as thin a layer as can be placed while getting full coverage. Typical installation thickness ranges from 1/16" up to 1/8" (1.5 to 3 mm), and ARDEX CD can be applied at a thickness of up to 1/2" (12 mm) in small, well-defined areas (see above). Please note that thicker areas will take longer to set than a dress coat, and will reduce the overall coverage.

Color

ARDEX CD is formulated from Portland cement and is available in gray. As concrete color and jobsite conditions vary widely, it is not intended that this will match the color of the concrete being resurfaced or an adjacent concrete pad. Jobsite conditions such as direct sunlight and wind, as well as the surface of the dressing being exposed to moisture before it completely sets, can lead to color variations in the appearance of the dressing. Should this occur, it can often be completely corrected by pre-wetting the surface of the discolored dressing and misting it with a vinegar solution diluted with 3 parts of water. Allow the vinegar to stand on the surface for a minimum of 10 minutes without allowing it to dry. Rinse clean and allow to dry thoroughly. Should the condition persist, the use of a pigmented sealer such as ARDEX CG[™] CONCRETE GUARD[™] (gray or pigmented tintable base) may be required. Consult the ARDEX Technical Service Department for additional information.

Curing

Although ARDEX CD requires no special curing procedures, avoid applying this product if rain is expected within 6 to 8 hours or freezing temperatures could occur within 24 hours of application. As with any cementitious material, these conditions can alter the appearance and performance of the dressing.

Wear Surfaces

As is the case with all concrete surfaces, ARDEX CD should be sealed with a waterborne, breathable concrete sealer to prevent dusting and to help resist damage from standing water, salt and oil, as well as staining and marking. ARDEX CD can be sealed as soon as the dressing hardens

sufficiently to work on without damaging the surface. ARDEX recommends the use of ARDEX CG CONCRETE GUARD.

Reflective Cracking

ARDEX CD is formulated as a highly durable, non-structural wear surface. As such, it is important to note that no one can predict with 100% accuracy the appearance of cracking in a non-structural topping. While there can be several causes for cracking, it must first be understood that the installation of a thin layer of non-structural topping is not capable of restraining movement in the structural slab, which could lead to reflective cracking. Areas most likely to telegraph include existing cracks in the floor, control joints (saw-cuts) and cracks off of the corners. Cracks may telegraph up into the surface in any area that exhibits movement.

Notes

The pot life of ARDEX CD is approximately 30 minutes at 70°F (21°C), while the working time is approximately 10 to 15 minutes. Pot life and working time will vary with ambient temperatures.

Always install an adequate number of properly located test areas, including the sealer and any desired colorants, to determine the suitability and aesthetic value of the products for the intended use. As sealers vary, always contact and rely upon the sealer manufacturer for specific directives regarding intended end use of the product.

ARDEX CD is intended for resurfacing interior and exterior concrete in residential and commercial applications subject to foot and rubber-wheeled traffic. ARDEX CD is not intended for industrial uses such as heavy manufacturing or areas with heavy truck traffic. Do not use in fountains, inside swimming pools or any areas that will be permanently submerged.

Do not mix 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 substrate is warm and follow warm weather instructions available from the ARDEX Technical Service Department.

Precautions

ARDEX CD 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.

Technical Data According to ARDEX Quality Standards

All data based on a mixing ratio of 2.75 parts powder to 1 part water by volume at 70°F (21°C). Physical properties are typical values and not specifications.

Mixing Ratio: 5 guarts (4.75 L) of water per

> one 40 lb (18 kg) bag For smaller batches, mix 2.75 parts powder to 1 part

water by volume

on Smooth Substrate

(approx.)

Material Requirements: 100 to 120 sq. ft. per bag at 1/16" (9.3 to 11.1 m² per bag at 1.5 mm) 50 to 60 sq. ft. per bag at 1/8"

(4.6 to 5.6 m² per bag at 3 mm) Application methods and the texture of the concrete being coated will affect these rates.

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

(ASTM C109/mod -

Air cure only)

Pot Life: 30 minutes

Working Time: Approx. 10 to 15 minutes Walkable: When coating is thoroughly dry

Install Coating: Waterborne: When hard

(approx. 2 hours)

Rubber-wheeled traffic: Consult sealer manufacturer VOC: 0 g/L, calculated SCAQMD 1168

Packaging: 40 lb/18 kg net weight 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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AT126 (08/10)

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