



ARDEX CD™

Concrete Dressing

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 commercial and residential applications

Use for interior and exterior floors and walls

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ARDEX CD™

Concrete Dressing

Description and Usage

ARDEX CD™ is a concrete resurfacing compound modified with high-performance polymers for exceptional bond strength. Formulated from a blend of Portland cement and other hydraulic cements, ARDEX CD can be used 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, grinding or similar. High-pressure (5000 psi) power washing may also be used to remove dust, dirt and debris, 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.

The concrete substrate must be absorbent to receive ARDEX CD. Any additional preparation required to achieve this must likewise be mechanical.

Substrate and ambient temperatures must be a minimum of 50°F (10°C) for the installation of ARDEX products.

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 more detailed information on substrate preparation, please refer to the ARDEX Substrate Preparation Brochure at www.ardexamericas.com.

Recommended Tools

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

Joints and Moving Cracks

Under no circumstances should ARDEX CD be installed over any joints or any moving 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 by installing a flexible sealing compound specifically designed for use in moving joints, such as ARDEX ArdiSeal™ Rapid Plus. Failure to do so may result in cracking and/or disbonding of the topping. Even the slightest amount of movement in a control joint will cause the ARDEX CD to show a hairline crack in a pattern reflective of the joint.

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

Dormant Cracks

Before proceeding with the installation, all dormant cracks must be prefilled with a fully rigid, high-modulus, 100% solids material, such as ARDEX ArdiFix™. Please note that the repair material must be sand broadcast to refusal while still fresh and allowed to cure fully prior to removing all excess sand.

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.

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 (min. 650 rpm). 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 CP™ Concrete Patch.

Thickness of Application

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 other hydraulic cements 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 often completely sets, can lead to color variations in the appearance of the dressing. Should this occur, it often can be corrected completely by pre-wetting the surface of the discolored dressing and misting it with a vinegar solution diluted with 3 parts 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, a pigmented sealer such as ARDEX CG Gray can be used. 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.

Reflective Cracking

ARDEX CD is formulated as a highly durable, nonstructural 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 thin layers of non-structural toppings are not capable of restraining movement in the structural slab, which could lead to reflective cracking. Areas most likely to telegraph include those with deflection of a concrete slab, vibration of a concrete slab in metropolitan areas due to truck traffic and subways, high rise buildings that sway or "rack" in the wind, existing cracks in the floor, control joints or saw-cuts, expansion joints and small cracks off of the corners of metal inserts such as electrical boxes or vents in the floor. We know of no method to prevent this telegraphing from occurring.

Notes

FOR PROFESSIONAL USE ONLY.

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 in 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

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

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 quarts (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.
Approximate Coverage:	Up to 120 sq. ft. per bag at 1/16" (11.1 sq. m at 1.6 mm) Up to 60 sq. ft. per bag at 1/8" (5.5 sq. m at 3.2 mm) Application methods and the texture of the concrete being coated will affect these rates.
Compressive Strength (ASTM C109/mod – Air cure only):	4000 psi (27.6 N/mm ²) at 28 days
Pot Life:	30 minutes
Working Time:	Approx. 10-15 minutes
Walkable:	Approx. 2 hours
Install Waterborne Coating:	When hard (approx. 2 hours)
Cure Time to Receive Traffic:	Consult sealer manufacturer
Color:	Gray
VOC:	0
Packaging:	40 lb./ 18 kg net weight 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.

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