



ARDEX PANDOMO® CF1

Commercial Design Leveling Compound for ARDEX PANDOMO® Floor and FloorPlus (White)

Use to create ARDEX PANDOMO® Floor and FloorPlus wear surfaces

Fast-setting and self-drying

For thicknesses from 1/4" up to 1" (6 to 24 mm)

Self-leveling

**White color allows a wide range of colors when pigmented with
ARDEX PANDOMO® CC Color Concentrates**

Portland cement-based

Use over new or existing concrete

For commercial, retail and light industrial applications

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ARDEX PANDOMO® CF1

Commercial Design Leveling Compound for ARDEX PAND

Description and Usage

ARDEX PANDOMO® CF1™ is a self-drying, self-leveling, no troweling topping for fast-track resurfacing, smoothing or leveling of indoor concrete. Formulated with a blend of Portland and other hydraulic cements, along with special redispersible powdered polymers and selected sand aggregates, ARDEX PANDOMO CF1 can be installed from 1/4" to 1" (6 to 24 mm) in one operation, hardens quickly and can be lightly walked on in as little as 2 to 3 hours. Use ARDEX PANDOMO CF1 for producing high-end, creatively designed wear surfaces of ARDEX PANDOMO Floor and FloorPlus in commercial areas such as retail stores, shops, hotels, cafés and vestibules, or even for light industrial use.

Substrate Preparation

All concrete substrates must be solid, thoroughly clean and free of oil, wax, grease, asphalt, latex and gypsum compounds, curing and sealing compounds, and any other contaminant that might act as a bond breaker. If necessary, mechanically clean the substrate down to sound, solid concrete by shot blasting or similar. Overwatered, frozen or otherwise weak concrete surfaces must also be cleaned down to sound, solid concrete by mechanical methods. The prepared concrete must have a minimum IFCI Concrete Surface Profile of 3 (CSP #3). Any additional preparation needed to achieve this must likewise be mechanical. Acid etching, adhesive removers, solvents, sweeping compounds and sanding are not acceptable means for cleaning the substrate. Substrates must be dry and properly primed 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.

Recommended Tools

Mixing and Application: ARDEX T-1 Mixing Paddle, ARDEX T-10 Mixing Drum, ARDEX T-4 Spreader, ARDEX T-5 Smoother, ARDEX MB-5.25 Measuring Bucket (5 1/4 quarts/5 liters per 50 lb/22.7 kg bag), and a 1/2" heavy-duty drill (12 mm, min. 650 rpm).

Surface Processing: Laegler TRIO Machine, Festool ROTEX RO 150 FEQ-Plus Hand Sander with vacuum, sanding and burnishing discs, and a lint-free roller for the sealer.

Cracks and Joints

Before proceeding with the installation, all dormant cracks greater than 1/32" (0.79 mm) wide must be prefilled with ARDEX ARDIFIX™. Please note that the repair material must be sand broadcast to refusal while still fresh and allowed to cure fully (approx. 45 min.), followed by removing all excess sand.

Under no circumstances should ARDEX PANDOMO CF1 be installed over any joints or 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. 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 PANDOMO CF1 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.

Priming

ARDEX PANDOMO Floor and FloorPlus require priming with ARDEX EP 2000™ SUBSTRATE PREPARATION EPOXY. Follow the general recommendations for substrate preparation above, and apply the ARDEX EP 2000 with a sand broadcast carefully following the instructions given in the ARDEX EP 2000 Technical Brochure.

For a faster priming system, substitute ARDEX MC™ RAPID with sand broadcast for the ARDEX EP 2000 using standard installation procedures. Work can proceed over ARDEX MC RAPID after only 4 hours of curing. Please note that when used in this manner, ARDEX MC RAPID is not considered a moisture control system. If moisture control is needed (greater than 75% RH when measured in accordance with ASTM F2170), ARDEX MC™ ULTRA must be used.

Thickness of Application

ARDEX PANDOMO CF1 can be installed from 1/4" up to 1" (6 mm to 24 mm) over large areas in one pour. ARDEX PANDOMO Floor and FloorPlus decorative wear surfaces are created using a thin, self-leveling cement topping. Please note that while ARDEX PANDOMO CF1 does flow to seek its own level, the overall finished floor flatness is dictated by the flatness of the existing substrate and the thickness of the topping applied.

Mixing and Application

For the application and drying of ARDEX PANDOMO floors, the space, substrate and products must be acclimated to 50° to 77°F (10° to 25°C), and an ambient relative humidity of 40-60%.

ARDEX PANDOMO CF1 is mixed 2 bags at a time. For best results, pre-blend the total anticipated quantity of water with the prescribed amount ARDEX PANDOMO CC Color Concentrates to minimize color variation between batches. Mix each 50 lb (22.7 kg) bag with 5 1/4 quarts (5 liters) of water. Pour the pigmented water in the mixing drum first, and then add each bag of ARDEX PANDOMO CF1 while mixing with an ARDEX T-1 Paddle and a 1/2" heavy-duty drill (12 mm, min. 650 rpm). Mix thoroughly for approximately 2 to 3 minutes to obtain a lump-free mix. **Do not overwater!** Excessive foam while mixing or settling of the sand aggregate while placing indicates overwatering.

ARDEX PANDOMO CF1 has a flow time of 10 minutes at 70°F (21°C). Pour the liquid mix on the floor and spread with the ARDEX T-4 Spreader. Immediately smooth the material with the ARDEX T-5 Smoother in a wavy pattern to enhance the aesthetic appearance of the surface. Wear baseball or soccer shoes with non-metallic cleats to avoid leaving marks in the liquid ARDEX PANDOMO CF1.

For information on pumping, please consult the ARDEX Technical Service Department.

ARDEX PANDOMO FloorPlus

To create ARDEX PANDOMO FloorPlus surfaces, float approximately 2.5 oz. (70.9 g) by weight per 10 sq. ft. (0.93 m²) of ARDEX PANDOMO HG (white, black or gray) into the freshly spread and smoothed ARDEX PANDOMO CF1. Do not

PANDOMO® Floor and FloorPlus (White)

disturb the surface of the topping once the ARDEX PANDOMO HG has been floated.

Processing the ARDEX PANDOMO CF1 Surface

The processing of the ARDEX PANDOMO CF1 surface is key to the success of the installation. When using ARDEX PANDOMO CF1, the processing is the same for both ARDEX PANDOMO Floor and FloorPlus surfaces.

Once the ARDEX PANDOMO CF1 has been allowed to dry for a minimum of 24 hours (70°F/21°C), sand the dry surface using the Laegler TRIO Machine and standard wood finishing 120 to 150 grit sandpaper. The color selected and age of the installation when processed will determine the grit size. Sand with at least two passes, with subsequent passes always done at a 90° angle to the previous pass. For best results, proceed with each pass at a slow, steady walking pace. After the sanding process, buff the entire surface with a floor burnisher and a white pad to remove any residual dust. Please note that for each stage of the processing, the edges should be done using the Festool hand sander and same grit sanding disc.

For scheduling purposes, please note that the space to receive the ARDEX PANDOMO floor must be made available to the contractor for a minimum of seven days without any disruption. During this period it is essential that no work is carried out other than the work in question and that only the contractor's personnel are allowed to enter the site, since the floor must not be generally trafficked until after drying and the final coating and treatment have been applied.

Tips for a Successful Installation

- Continue to mix the pigmented water to keep the color concentrate from settling out.
- The ARDEX PANDOMO CF1 surface cannot be too hard, but it can be too soft. If it still feels cold or damp after 24 hours, wait a little longer before processing.
- Start up the sanding machine with the discs in the air rather than on the floor, and begin forward motion as the discs come in contact with the surface.
- Placing the sanding heads on the floor can sometimes cause an aggressive initial cut, so always try to start processing in an unobtrusive place (behind a door, in a corner, etc.).
- Keep the sanding machine moving. Pausing can cause variations in the finished appearance.
- Cleanliness is important when processing the surface! Make sure the machine contacts with the floor are clean, and wear protective booties over shoes to prevent marking.
- Not all sand paper is created equal, so exercise caution and always break in the sanding discs before applying them to the ARDEX PANDOMO CF1 surface.
- Sanding discs will last for approximately 215 to 270 square feet (20 to 25 m²), so be sure to change them as needed when processing the surface.
- When sealing ARDEX PANDOMO CF1, do not place sealer containers directly on the surface.

- The ARDEX PANDOMO Floor/FloorPlus installation must be completed in a continuous fashion, including application of the sealer. If any part of the process is interrupted by other trades, it is likely to cause aesthetic variance, and potentially irreparable damage.
- Do not drip or spill any liquids onto the ARDEX PANDOMO CF1 surface throughout the entire installation process.

Wear/Stain Protection

Once installed and processed, the ARDEX PANDOMO CF1 surface must always be protected by a suitable ARDEX wear protection system. Use the ARDEX PANDOMO ES/PS Protective Wear Layer System as described in each of the technical brochures.

Once sealed, any finished floor surface requires routine cleaning and maintenance. For recommended maintenance procedures, please refer to the ARDEX PANDOMO Maintenance Guide. Cleaning an ARDEX PANDOMO floor is very easy but must be performed in strict accordance with the printed cleaning guidelines. It is strongly recommended that a maintenance contract be reviewed and agreed upon with the installer to best preserve the value of the floor.

ARDEX PANDOMO CF1 wear surfaces are intended for commercial, retail and light industrial applications. Excessive service conditions, such as steel- or hard plastic-wheeled traffic, or dragging metal equipment or loaded pallets with protruding nails over the floor, will cause scratching gouging and indentations. ARDEX PANDOMO CF1 is not a resurfacing topping for heavy-duty manufacturing or industrial floors, or for chemical environments requiring customized industrial toppings. As with any floor covering (wood, soft natural stone, marble, etc.), allowances must be made for scratches or abrasion that occur due to moving or sliding furniture or fixtures over the surface. Keeping the floor surface clean and free of dirt or other contaminants will also help to minimize scratching and abrasion due to foot traffic.

Protecting the Finished Installation

Whenever possible, the ARDEX PANDOMO CF1 installation should be scheduled as the final step in the construction process. If this is not possible, please note that the installation should not be open to full traffic for 7 days after the installation is sealed. To protect the installation from damage due to trade or construction traffic, cover it with Surface Shields Builder Board™. Using other, non-breathable covers may cause surface discoloration.

Cracks

ARDEX PANDOMO CF1 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 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 in the concrete slab, vibration of the 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 the corners of metal inserts such as electrical boxes or vents in the floor. While priming with ARDEX EP 2000 is the best way to minimize the possibility of reflective cracking, cracks may telegraph up into the surface in any area that exhibits movement. We know of no method to prevent this telegraphing from occurring.

Notes

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 topping and sealer. Test for moisture using the relative humidity method in accordance with ASTM F2170. Where substrate moisture is greater than 75% RH, install ARDEX MC ULTRA. For further information, please refer to the ARDEX Technical Brochure.

ARDEX PANDOMO Floor and FloorPlus wear surfaces are not intended to be perfectly homogeneous in appearance. The physical act of spreading and smoothing, along with the sanding process, will result in optical variations in the appearance of the floor even though it is very flat. The aesthetic appearance of the floor that is created is subject to possible technical and artistic tolerances. Variations in the overall finished appearance are an intended effect and should be expected.

Always install an adequate number of properly located test areas, including the processing and ARDEX PANDOMO ES/PS Protective Wear Layer System. A sample mock-up of the finished floor must be made on site and approved by the owner's representative, including the suitability for intended use and aesthetics, and should be evaluated and approved under the planned lighting conditions for the finished floor. Acceptance of the floor must be made immediately after completion of the floor and it remains the responsibility of the owner's representative to protect the finished surface with a breathable covering until the space is opened for final use.

The finished ARDEX PANDOMO floor does not achieve its published surface hardness until after 28 days.

While ARDEX PANDOMO Floor and FloorPlus can be installed over concrete that contains in-floor heating, ARDEX PANDOMO Floor and FloorPlus should not be used to directly encapsulate any heating system. If the concrete substrate has in-floor heating, it should be turned off and the concrete allowed to cool before installing ARDEX PANDOMO Floor or FloorPlus.

Low substrate temperatures require longer drying times for ARDEX products. Do not install ARDEX PANDOMO CF1 before the primer has dried thoroughly. Low temperatures will also extend the drying time needed before processing the surface.

Never mix with cement or additives other than ARDEX approved products. Observe the basic rules of concrete work. Acclimate the space and materials in accordance with the guidelines outlined above.

Precautions

ARDEX PANDOMO CF1 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 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 4 parts powder to 1 part water by volume at 70°F (21°C)

Mixing Ratio:	5 1/4 quarts (5 liters) of water per one 50 lb (22.7 kg) bag
Coverage:	25 sq. ft. per bag at 1/4" (2.3 m ² at 6 mm) 12.5 sq. ft. per bag at 1/2" (1.2 m ² at 12 mm)
Flow Time:	10 minutes
Initial Set (ASTM C191):	Approximately 10 minutes
Final Set (ASTM C191):	Approximately 45 minutes
Compressive Strength (ASTM C109/mod – Air cure only):	~5000 psi (352 kg/cm ²) at 28 days
Flexural Strength (ASTM C348):	1000 psi (70 kg/cm ²) at 28 days
Walkable:	2 to 3 hours
Begin Processing:	24 hours
Color:	White
Packaging:	50 lb (22.7 kg) net weight in paper bags
Storage:	Store in a cool dry area. Do not leave bags exposed to sun.
Shelf Life:	6 months, if unopened.
Warranty:	ARDEX Engineered Cements Standard Limited Warranty applies.

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