



ARDEX CL 5

High Strength Self-Smoothing Topping

Levelling and smoothing of floors

High strength cementitious topping material for residential, commercial and industrial areas

For thickness from 3 to 10mm in one application

Protein-free

Pumpable

Early trafficable

Green Label certified



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DESCRIPTION

ARDEX CL 5 is a special formulated polymerized self-leveling and smoothing topping for used internally in commercial and industrial floor areas. Its high mechanical strength and resistance to abrasion, makes it an ideal product for new floor topping or underlayment for receiving floor coverings and resinous coatings.

ARDEX CL 5 provides a smooth, flat and level surface that can be installed from 3mm up to maximum thickness of 10mm in a single application, it is applied at 3~5mm normally.

For industrial application, minimum 5mm is required.

USE

ARDEX CL 5 is used in residential, commercial and Industrial areas. Use on substrates like cement screed, concrete, masonry surface, or light-weight boards.

BENEFITS

- Levelling and self-smoothing of floor areas
- High wearing cementitious topping material for residential, commercial, and industrial floors
- For a thickness of 3 –10mm in one application
- Suitable for use as an underlay or overlay application
- Protein-free
- Pumpable
- Early trafficable

SURFACE PREPARATION

The substrate must be dry, clean and sound, free of dust, loose particles, grease or any other contaminants. Surfaces should be smooth and free from honeycomb cracks, protrusions or voids. Concrete surfaces should be free from laitance which, if present, should be removed by scabbling or grit blasting to produce a sound surface. After cleaning, the floor must be swept free of dust and damped down with water to satisfy the natural absorption. Pools of water must be dispersed. All joints must be raked out and filled with a stiff mix of smoothing compound.

NOTE: Floor has to be dry with moisture content < 5%. If the floor is damp through construction moisture or rising damp, use ARDEX WPM 300 Hydrexoxy.

PRIMING

Priming is mandatory especially onto very absorbent subfloors such as concrete or cement/sand screed.

Use ARDEX P 51 to seal the pores, prevent air bubbles and pinholes from rising through the surface of leveling compound and also to promote excellent uniform adhesion to the substrate. With smooth, dense and non-absorbent subfloors, it may be necessary to use ARDEX P 82 Primer to ensure adequate adhesion of the subsequently applied ARDEX CL 5. Apply the primer by using a spray or roller.

Spread the primer across the substrate and allow it to be dry. Do not install the leveling compound until the primer is thoroughly dry.

MIXING

Pour 1 bag of ARDEX CL 5 powder into 4.75 – 5.25L of clean water and mixed using an electric drill (min. 600rpm) The use of ARDEX mixing buckets is recommended to reduce the incidence of unmixed powder around the bottom of the bucket.

Mix steadily and thoroughly until it become homogeneous and a lump-free fluid mortar is produced. Continue mixing for another minute until an even consistency is achieved. Do not overdose the water.

APPLICATION

Pour ARDEX CL 5 onto the dried primed subfloor. Use a trowel or spreader to spread the mortar completely. The mixed mortar will be self-smooth within the first 15 - 20 minutes. A 3mm layer of ARDEX CL 5 will be walkable after approximately 2-3 hours at 30°C; The time is also reduced where temperature and application thickness are applied to absorbent subfloors. Apply at temperatures above 10°C. For areas that require over 10mm thickness, Please consult Ardex sales representative for more information.

COVERAGE

Approximately 1.5kg of ARDEX CL 5 for powder/ m²/mm. The coverage depends on the flatness of the substrate.

FOR HIGH STRESS AREAS

The thickness should be minimum 5–6mm. Add 6 kg of ARDEX E 26 to 25kg of ARDEX CL5 to increase the bonding strength, better flexibility and wear – resistance in subfloors where the surface is subject from mid-heavy duty traffic areas.

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PACKAGING

25kg multi-layer paper bags incorporating a poly liner.

LIMITATIONS

For internal use, the subfloor temperature must be a minimum of 10 °C. Not suitable for asphalt and timber subfloors that subject to heavy duty traffic areas.

For external use, please consult ARDEX technical services for further technical details and recommendations.

The colour of the floor using ARDEX CL 5 is not always uniform and consistent which is a typical feature of cementitious-based products and also depending on the application. Best results are achieved when application does not have interruptions, long pauses or the like.

TECHNICAL DATA

Form:	grey powder
Bulk density:	approx. 1.30kg/L
Flow life at 30°C:	approx. 20 minutes
Initial setting time:	approx. 40-60 minutes
Final setting time:	approx. 50-70 minutes
Compressive Strength	
24 hours:	≥ 9 N/mm ²
7 days:	≥ 30 N/mm ²
28 days:	≥ 40 N/mm ²
Flexural Strength	
1 day:	≥ 3 N/mm ²
7 days:	≥ 5.5 N/mm ²
28 days:	≥ 8.5 N/mm ²
Shrinkage	
7 days	< 0.03%
28 days	< 0.1%
Tabor Abrasion 100 cycles, H22 wheel, 1000g load	
28 days	< 0.5g loss

STORAGE AND SHELF LIFE

ARDEX CL 5 should be stored under the same conditions as cement; store ARDEX CL 5 in cool, dry shaded warehouses at 25°C and 50% relative humidity and away from the floor. When stored under the correct conditions, ARDEX CL 5 will have a shelf life of 6 months.

SAFETY PRECAUTIONS

ARDEX CL 5 is non-hazardous in normal usage. The presence of cement in the product gives an alkaline mortar which may cause some irritation. Avoid contact with skin; wash off with soap and water before drying takes place. In case of contact with eyes, rinse carefully and thoroughly with water and seek medical advice. In case of ingestion, seek medical assistance.

During the installation process, adequate ventilation of the work area should be maintained without causing the entry of contaminants to other parts of building. Consult the relevant Material Safety Datasheet for further information (available upon request and online at www.ardex.com.sg).

DISCLAIMER:

The technical datasheets are based on the latest information and given in good faith and represent the best of our knowledge and experience at the time of printing. They are primarily offered for user's consideration and evaluation.

It is the responsibility of the user to conduct their own tests to validate the suitability of the products. It is also the responsibility of the user to ensure that the products are used and handled correctly and in accordance with any applicable standards, the product instructions and recommendations and only for the uses they are intended. As we have no control over site conditions and the execution of the work, we accept no liability for any loss or damage which may rise as a result thereof. We also reserve the right to update the information at any time without prior notice to you to reflect our ongoing research and development program.

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