Cork-based decorative finish applicable on walls, floors and facades.

Decorative coating based on cork and water-based resins (grain size 0-1 mm) for the decoration of floors, walls, ceilings and facades, for interiors and exteriors. The coating has all the typical advantages of cork: breathability, thermal insulation, excellent reaction to fire, resistance to atmospheric agents and durability. Infinite aesthetic effects can be created by using *Decork Design*, ranging from the creation of smooth, dotted, bush-hammered, modern or antiqued finishes.

#### **BENEFITS**

- Suitable to create decorative effects.
- Suitable for indoor and outdoor.
- Breathable and water-repellent.
- Elastic.
- Excellent aesthetic effect.
- Easy and quick application.
- LEED accredited and CE branded.

#### **YIELD**

 $0.8 - 1.0 \text{ kg/m}^2 \text{ in 2 coats.}$  $0.16 - 0.2 \text{ lb/ft}^2 \text{ in 2 coats.}$ 

#### **COLOUR**

Diasen colour chart.

#### **PACKAGING**

18 kg (39.6 lb) plastic bucket + 2 kg (4.4 lb) of colour.

Pallet: 32 bucket (576 kg – 1267.2 lb) + 32 packs of colour (64 kg – 140.8 lb).

#### **UB1 Colour**

18 kg (39.6 lb) plastic bucket + 4.5 kg (9.9 lb) of colour.

Pallet: 32 bucket (576 kg – 1267.2 lb) + 32 packs of colour (144 kg – 316.8 lb).

#### **APPLICATION FIELDS**

Product designed for the coating and decoration of internal walls, ceilings and floors and facades. *Decork Design* has excellent adhesion capacity on

any type of substrate and for this reason, with the right primer, it can be used in countless situations: metal, plasters, cementitious substrates and tiles. *Decork Design* is suitable for indoors and outdoors applications.

#### **STORAGE**

The product must be stored in the original containers perfectly closed, in well-ventilated areas, away from sunlight, water and frost, at temperatures between +5°C and +35°C. Storage time 12 months.

#### PREPARATION OF THE SUPPORT

The substrate must be completely hardened and have sufficient strength. The surface must be perfectly level, thoroughly clean, dry, without oils, greases, crumbly and inconsistent parts or other materials that may affect the adhesion of the product. In cases where the surface is on the whole friable, completely scarify it until a good support is obtained and restore the lesions or degraded parts with suitable mortar. In case of water cleaning, wait for the support to dry completely. Any moisture present in the substrate and the vapor that forms as a result of irradiation may affect the adhesion of the applied product. On flat horizontal surfaces, provide adequate slopes for the flow of water.



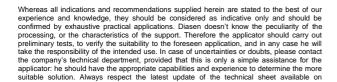














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Decork Design adheres to various types of substrate without the need for a primer, however it is recommended to carry out a preliminary test to check adhesion and the possible need to use a primer.

# Plasters from the *Diathonite* line or new plasters

Make sure that the plaster is well levelled so that the surface remains as rough as possible, otherwise apply a coat of a suitable *Diasen* smoothing compound beforehand. Apply the specific fixative *D20* both on smoothing compounds and directly on plasters (see technical data sheet).

In case of cracked and micro-cracked substrates, apply the white *Color Primer* (see technical data sheet).

#### **Old plaster**

Make sure that the plaster is consistent and well adhered to the substrate, if not, provide for partial or total removal and remaking of the same.

In the case of painted plasters, given the great variety of paints on the market, it is advisable to perform an adhesion test to verify the suitability of the application or the need to use primers *D20* (see technical data sheet) and/or *Color Primer* (see technical data sheet).

On rough plasters proceed with the direct application of *Decork Design*, while in the case of rough and dusty substrates use the primer *Color Primer* (see technical data sheet).

#### **Plasterboard**

On plasterboard surfaces, make sure that the joints are sealed and smoothed. Apply the fixative *Grip Primer* (see technical data sheet).

#### Concrete

In the case of a newly built cement base, this must be sufficiently cured. Any crack, hole or irregular area shall be restored with suitable cement mortar. For the treatment of the reinforcing rods apply a suitable passivating product. For better adhesion on smooth, not wet concrete, we recommend using *Grip Primer* (see technical data sheet).

On damp substrates and not in contact with the ground, in order to avoid blistering or detachment phenomena, use *Vapostop* (see technical data sheet) as a primer. If the substrate is subject to rising damp, it is necessary to use *WATstop* (see technical data sheet). bì *WATstop* can also be used to fill small cracks or cracks. On rough concrete use the *Vapostop* primer (see technical data sheet.

#### **Tiled floors**

Make sure that the tiles are well bonded to the substrate; otherwise, remove them and restore them with suitable cement mortar. The tiled surface must not show traces of detaching substances, such as greases, waxes, oils, chemicals, etc.

After carefully cleaning the substrate, the surface must be treated with *Grip Primer* (see technical data sheet). To fill the joints between the tiles and create a perfectly level surface, apply the product *Vaposhield* (see technical data sheet) by hand with an aluminum or rubber trowel in two layers. *Vaposhield* should also be used if the substrate is damp or affected by rising damp. Considering the great variety of tiles present, carry out a test to evaluate the result.

#### Wood

Thoroughly clean the surface eliminating dust, crumbly parts and flaking flakes. The wood must be completely dry, well cohesive and dimensionally stable. Prime the wooden surfaces with *Grip Primer* (see technical data sheet) before proceeding with the application of *Decork Design*.

Do not apply the product on boards, matchboards or supports with a high number of joints.

#### Metal

Perfectly clean the surface, eliminating dirt and any loose paint. Before proceeding with the application of *Decork Design*, prime the metal surfaces with *Grip Primer* (see technical data sheet).



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In the presence of rust, before applying *Grip Primer*, treat the surface with suitable anti-rust products. If the metal surface is painted, it is recommended to carry out a test to verify the perfect adhesion of the system.

#### **Smooth surfaces**

On particularly smooth and non-absorbent surfaces, use the specific primer *Grip Primer* (see technical data sheet). For supports not listed in the data sheet, contact *Diasen* technical office.

#### **Treatment of joints**

Any joints on the substrate (joints between panels in concrete or other material, expansion, control or insulation joints) must be treated before applying *Decork Design* with the polyurethane sealant *Diaseal Strong* (see technical data sheet). The points of contact with the thresholds of doors and windows shall also be treated with the *Diaseal Strong* sealant.

#### **MIXING**

- Always mix the product before application with a helical-tip mixer until a homogeneous mixture is obtained.
- Completely empty the contents of the bag into the bucket and add the color by pouring the entire contents of the package.
- Mix the compound for at least 2 or 3 minutes until a uniform color mixture is obtained. The product is ready for use and generally should not be diluted. In extremely hot climatic conditions it is possible to add:
  - For applications by hand, maximum 5% of water (0.9 L 0.2 gal of water each 18 kg 39.6 lb packaging).
  - For applications with hopper gun, maximum 10% of water (1.8 L – 0.47 gal per 18 kg – 39.6 lb packaging).
- It is recommended to always dilute the product in the same way to avoid variations in colour.
- · Mix the compound again.

• Never add external components to the mixture.

#### **APPLICATION**

#### Application by hand

- 1. Wait for any primer used to dry completely.
- 2. Apply a first generous layer of Decork Design with a steel trowel with rounded edges. The first layer can be used as a smoothing compound to even out the surface. In case of rain on a product that is not perfectly dry, carefully check its suitability for covering.
- 3. After the first layer has completely dried (about 10 hours at 23°C/73.4°F and 50% relative humidity), apply a second thin layer of product to finish. For a better result and a more homogeneous coating it is recommended to cross the layers.
- Trowel immediately after application with a plastic spatula with 45° edges.
- **5.** Application time: approximately  $80/110 \text{ m}^2$   $(860.8/1183.6 \text{ ft}^2)$  per day.

#### Application with hopper gun DS-Spray Gun

- **1.** Wait for any primer used to dry completely.
- **2.** The hopper gun must have:
  - minimum pressure of the compressor
     5.0 bar:
  - nozzle diameter 3.0 4.0 mm (0.12 0.15 in).
- Apply a first coat of Decork Design with fluid circular movements and cover the entire surface. In case of rain over not perfectly dry product, carefully verify the suitability of the next covering.
- **4.** When the first coat is completely dry (about 10 hours at 23°C/73.4°F and 50% relative humidity), apply a second coat of *Decork Design* by using the same method as previously, until complete covering of the substrate.
- 5. Do not trowel.
- **6.** Application time: approximately 200/250 m<sup>2</sup> (2152/2690 ft<sup>2</sup>) per day.





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Decork Design can also be applied by **spraying machine** DS-5500 Texture Sprayer, nozzle diameter 3.00 mm (0.12 in), pressure level 4 (4.0 atm); in this case, the application time ranges from 700 to 800 m<sup>2</sup> (7532 and 8608 ft<sup>2</sup>) per day.

At the end of the application of the second layer, to obtain a smooth surface, the *Decork Design* finish can besanded and then protected with *Aquafloor Eco* (see technical data sheet). For floor applications, the *Decork Design* decorative finish must always be protected with the *Aquafloor Eco* coating (see technical data sheet).

#### **DRYING TIME**

At a temperature of 23°C/ 73.4°F and 50% relative humidity, the product dries in about 10 hours.

- Drying time is influenced by environmental relative humidity and by temperature and may significantly change.
- Protect Decork Design during the drying from rain, frost, direct sunlight and wind for at least 2 hours at a temperature of 23°C/73.4°F.
- If applied in higher amount than the expected ones, drying time may significantly increase.

#### **SUGGESTIONS**

• Do not apply with ambient and substrate temperatures below +5°C and above +35°C.

- During the summer season, apply the product in the coolest hours of the day, away from the sun.
- Do not apply with imminent danger of rain or frost, in conditions of strong fog or with relative humidity higher than 70%.
- Apply the product on completely dry surfaces.
- The product is not suitable for flat roofs.
   Possible stagnation of water can give rise to localized discoloration
- Before applying the product, it is recommended to cover thresholds, frames and any element that does not need to be coated.
- Keep the unused product in the original packaging.

#### **CLEANING**

The equipment used can be washed with water immediately after use. After the complete drying of the product, for cleaning it is recommended to use neutral detergents, not too aggressive. Choose the most suitable cleaning method (sponge, brush or hydro-cleaning) based on the type of dirt present.

#### **SAFETY**

During handling, use personal protective equipment and follow the instructions on the product safety data sheet.



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\* The above data, even if carried out according to regulated tests, are indicative and they may change when specific building site conditions vary.

| Technical Data*   |   |                 |  |  |
|---|---|-----------------|--|--|
| Features  |   | Unit            |  |  |
| Yield   | 0.8 – 1.0 in two coats<br>0.16 – 0.2 in two coats                               | kg/m²<br>lb/ft² |  |  |
| Aspect  | paste   | -               |  |  |
| Colour  | Diasen colour chart   | -               |  |  |
| Dilution  | By trowel If necessary max 5% (0.9 I – 0.2 gal per 18 kg – 39.6 lb bag)         | _               |  |  |
|   | By spray If necessary max 10% (1.8 I – 0.47 gal per 18 kg – 39.6 lb bag)        |                 |  |  |
| Waiting time between 1st and 2nd coat (T=23°C/73.4°F; R.H. 50%) | about 8 - 10  | hours           |  |  |
| Grain size  | 0 – 1<br>0 – 0.04   | mm<br>in        |  |  |
| Application temperature   | +5 / +35<br>+41 / +95   | °C<br>°F        |  |  |
| Drying time<br>(T=23°C/73.4°F; R.H. 50%)                        | 10  | hours           |  |  |
| Storage   | 12 months in original containers and well ventilated areas                      | months          |  |  |
|   | 18 kg (39.6 lb) plastic bucket + 2 kg (4.4 lb) of colour                        |                 |  |  |
| Packaging   | <b>UB1 Colour</b> : 18 kg (39.6 lb) plastic bucket + 4.5 kg (9.9 lb) of colour. | kg              |  |  |

<sup>\*\* 1680</sup> hours of weathering test are equal to about 10 years. This equivalence is merely indicative and it may vary depending on weather conditions where the product will be used.

| Final performances**   |                       |                           | Unit            | Regulation   | Results |
|--|-----------------------|---------------------------|-----------------|--------------|---------|
| Elasticity   |                       | 60%                       | -               | ISO 527-1    | -       |
| Crack Bridging Ability   |                       | 2.5<br>0.099              | Mm<br>in        | -            | -       |
| Weathering Test**  |                       | 1680 hours<br>(10 year**) | hours/<br>years | EN ISO 11507 | -       |
| Thermal conductivity (λ)   |                       | 0.086                     | W/mK            | EN 12667     | -       |
| Water vapour permeability  |                       | μ = 15                    | -               | EN ISO 7783  | -       |
| Abrasion resistance of the system Decork Design + Aquafloor Eco (shiny version)              | ystem Decork Design + | 70                        | -               | ASTM D 4060  | -       |
| Abrasion resistance of the system <i>Decork Design</i> + <i>Aquafloor Eco</i> (matt version) | Wear<br>Index         | 55                        | -               | ASTM D 4060  | -       |



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| Permeability to CO <sub>2</sub> | Class C1 | - | EN 1062-1 | - |
|---------------------------------|----------|---|-----------|---|
| Permeability to water           | Class W2 | - | EN 1062-1 | - |
| Transmission of water vapour    | Class V3 | - | EN 1062-1 | - |
| Gloss                           | Class G3 | - | EN 1062-1 | - |
| Grain size                      | Class S1 | - | EN 1062-1 | - |
| Thickness                       | Class E5 | - | EN 1062-1 | - |
| Crack Bridging                  | Class A5 | - | EN 1062-1 | - |

<sup>\*\*\*</sup>credits only valid for LEED for Schools, LEED for Core & Shell standards, v. 2009.

# LEED® Credits

| ***Standard LEED for New Construction & Major Renovation,<br>LEED for Schools, LEED for Core & Shell, v. 2009 |  |              |  |  |
|---|--|--------------|--|--|
| Thematic area   | Credit   | Points       |  |  |
| Energy & Atmosphere   | EAp2 - Minimum Energy Performance  | mandatory    |  |  |
|   | EAc1 – Optimize Energy Performance   | From 1 to 19 |  |  |
| Materials & Resources   | MRc2- Construction Waste Management  | From 1 to 2  |  |  |
|   | MRc4 – Recycled Content  | From 1 to 2  |  |  |
|   | MRc5 – Regional Materials  | From 1 to 2  |  |  |
|   | MRc6 - Rapidly Renewable Materials   | 1            |  |  |
| Indoor Environmental<br>Quality   | IEQc3.2 - Construction Indoor Air Quality Management Plan — Before Occupancy | 1            |  |  |
|   | IEQc4.2 - Low Emitting Materials - Paints and Coatings                       | 1            |  |  |



| Indoor Air Quality (AIQ) Certification |   |   |   |  |
|--|---|---|---|--|
| Evaluation of the results              |   |   |   |  |
| Regulat                                | tion or protocol  | Version of regulation or protocol   | Conclusion                                |  |
| French \                               | VOC Regulation  | Decree of March 2011 (DEVL1101903D) and Arrêté of April 2011 (DEVL1104875A) modified in February 2012 DEVL1133129A) | ÉMISSIONS DANS L'AIR INTÉRIEUR'  A+ A B C |  |
| French (                               | French CMR components  Regulation of April and May 2009 (DEVP090863 and DEVP0910046A) |   | Pass                                      |  |
| Italian C                              | AM Edilizia   | Decree 11 October 2017 (GU n.259 del 6-11-2017)   | Pass                                      |  |
| AgBB/ABG                               |   | Anforderungen an bauliche Anlagen bezüglich des<br>Gesundheitsschutzes, ABG May 2019, AgBB August<br>2018           | Pass                                      |  |
| Belgian                                | Regulation  | Royal decree of May 2014 (C-2014/24239)   | Pass                                      |  |
| Indoor A                               | Air Comfort®  | Indoor Air Comfort 7.0 of May 2020  | Pass                                      |  |
| Indoor A                               | Air Comfort GOLD®   | Indoor Air Comfort GOLD 7.0 of May 2020   | Pass                                      |  |
| BREEAM International                   |   | BREEAM International New Construction v2.0 (2016)   | Exemplary Level                           |  |
| BREEAM® NOR                            |   | BREEAM-NOR New Construction v1.2 (2019)   | Pass                                      |  |
| LEED®                                  |   | "Low-Emitting Material" according to the requirements of LEED v4.1  | Pass                                      |  |
| CDPH                                   | Classroom scenario  | CDPH/EHLB/Standard Method V1.2. (January 2017)  | Pass                                      |  |
|  | Office scenario   | CDPH/EHLB/Standard Method V1.2. (January 2017)  | Pass                                      |  |













