

# DECORFLEX® System

## Decorative Flexible Cementitious Protective & Waterproof Coating System

### CSI Div. 07 + 09

07 16 14 Acrylic Modified (Flexible) Cementitious Waterproofing  
09 97 32 Concrete and Masonry Coatings

### LEED Points

MR Credit 5.1, Regional Materials.....Up to 2 Points  
IEQ Credit 4.2, Low-Emitting Materials Paints and Coatings... 1 Point  
*Using this AQUAFIN product can help contribute to LEED certification of projects in the categories shown above.*

### Product Description:

DECORFLEX is a multi-layered, cementitious, acrylic emulsion based flexible decorative coating and waterproofing system. It is suitable for both interior and exterior applications, and can be applied over many different substrates to provide a decorative, protective coating. In combination with the system components, DECORFLEX can be used to achieve a wide range of finishes, such as stenciling, engraving, knock down or splatter, to give the appearance of stone, stucco, tile, brick, etc. It can also be applied to architectural foam shapes such as columns and moldings. The design possibilities are fully open to the imagination and artistry of the installer. DECORFLEX System components include a variety of cementitious coatings and mortars as well as reinforcement fabric, tapes, mesh and sealers.

### System Components:

1. Primer (for non-porous substrates)
2. Skim coat (for protection from hydrostatic pressure)
3. Base coat
4. Top coat
5. Stains & color packs (optional)
6. Sealers

### Typical Applications:

- Interior or exterior
- Horizontal, vertical, or overhead applications to concrete, cementitious overlays, masonry, brick, parging (render), CBU's (cement backer units), gypsum board (drywall), glass mat faced gypsum sheathing, steel, PVC, mastic asphalt (interior), roughened polystyrol, properly prepared existing cementitious terrazzo floors, ceramic, porcelain and quarry tiles.
- Balconies, plaza decks, stadiums, stairs
- Pool decks and other surrounding areas
- Retail spaces, restaurants, lobbies and other public areas
- Faux finishes for interior & exterior surfaces resembling travertine, granite, Venetian plaster, etc.
- Coating & decorating of architectural foam shapes
- Parking garages, turn lanes, driveways, helicopter landing pads
- Custom designs with stencils, engravings, pre-fabricated inlays, etc

### Advantages:

- Waterproofing & crack-isolation membrane

- Withstands pedestrian & vehicular traffic
- Solvent free, non-flammable, low odor
- No priming necessary in most cases
- Breathable (not a vapor barrier)
- Applied to moist/damp substrates
- Resists abrasion, mechanical wear & deicing salts
- Resists strong positive side hydrostatic pressure
- Compliant with Class A fire safety ratings
- UV, weather & freeze/thaw resistant
- Superior adhesion to many substrates
- Permanently flexible - Self curing
- Does not support the growth of mold & mildew
- Slip resistant finish - exceeds ADA standards

### Substrate Preparation:

The substrate must be sound, clean, open pored, and free from voids, gaping cracks or ridges and open pored (like fine sand paper). Remove bond breakers, such as oil, grease, dirt, loose particles, remains of form oils, water repellents, rust or other coatings by high pressure waterblasting or wet or dry sandblasting, diamond cup grinding, etc. Pay particular attention to sufficiently roughen slab and wall substrates to ICRI CSP 3 to 5 profile. Use mechanical means to prevent DECORFLEX from de-bonding!

Repair holes, defects, irregular surfaces, weak mortar joints, etc. with MORTAR-40 or MORTAR-LN.

Round edges at vertical external joints. Close large open pores and joint recesses of CMU blocks and joint unevenness in brick walls with sand/cement mortar or DECORFLEX-SK. "Sack" (close) bug holes with DECORFLEX-SK. Pre-water substrate (excluding drywall or similar) with clean water to saturated surface dry (SSD) condition, with no standing surface water.

Seal dry, dusty or very absorptive surfaces (i.e. light weight concrete, drywall, gypsum, plywood) with DECORFLEX liquid Component-B, diluted with water 1:4 to 1:5.

### Alkali sensitive substrates:

Protect and seal alkali sensitive metal substrates such as copper, aluminum, galvanized or zinc treated metal first with a primer (i.e. KRY-LON Primer, or equal) prior to applying (over-coating) DECORFLEX.

**NOTE:** Do not apply DECORFLEX at temperatures below 40°F (5°C) or to frozen substrates. Can be applied to 3 day old concrete at >86°F (>30°C) temperature and 5 day old at 60-70°F (15-21°C), or when concrete reaches minimum 2,000 psi. At high air temperatures, i.e. 86°F (30°C) and above, protect application from direct sun and wind to prevent premature surface drying and shrinkage cracks. Apply material in 2 (two) coats minimum. Use DECORFLEX-SK as 1st coat where negative side pressure from ground or rain water can be expected. Do NOT directly apply DECORFLEX over AQUAFIN-IC or similar crystalline waterproofing products.

## Application tools & cleaning:

DECORFLEX is applied using a combination of tools, including our custom tools as well as commercially available products. Clean tools and equipment with water immediately after use. Cured material can only be removed mechanically.

## Mixing Ratios & Coating Thicknesses of the DECORFLEX System Components

### Primer: DECORFLEX-P

2-component product, containing Component-A (powder) and Component-B (acrylic latex liquid) for non-porous or non-profiled substrates.

Prime substrate with DECORFLEX-P as follows:

- Delivered in a pre-determined mix ratio, mix Component-A with Component-B completely. Do not mix partial units.
- Prime concrete slab surfaces which are non-porous or not profiled with 1 coat DECORFLEX-P.
- At high temperatures outdoors (>75°F) add 8 - 12 oz (236 - 355 ml) water to liquid Component-B.
- Slab temperatures >95°F: cool substrate with soaker hoses prior to installation of primer.

**Packaging:** 5 gal pail/30 lb (13.6 kg)

Component-A (powder): 20 lb (9.1 kg)

Component-B (liquid): 1.1 gal/10 lb (4.1 L/4.5 kg)

**Consumption:** ~145 ft<sup>2</sup> @ 20 mils (~13.6 m<sup>2</sup> @ 0.5 mm) per unit.

### Skim Coat: DECORFLEX-SK

1-component product, simply mix with water. DECORFLEX-SK is used as a skim coat for all applications where negative side hydrostatic pressure from ground or rain water can be expected.

Apply DECORFLEX-SK as follows:

- Mixing ratio: 5 parts powder to 2 parts water  
50 lb powder to 1.6 - 1.8 gal water  
(22.7 kg to 6.1 - 6.9 l)
- Brush or trowel apply.
- DECORFLEX-SK must be the first coat directly in contact with the substrate. Slab temperatures >95°F: cool substrate with soaker hoses prior to installation.

**Packaging:** 50 lb bag (22.7 kg)

**Coating Thickness:** min: ~20 mils (0.5 mm)

max: ~60 mils (1.6 mm)

**Consumption:** ~98 ft<sup>2</sup> @ 1/16" (9.1 m<sup>2</sup> @ 1.6 mm) per unit

### Base/finish coat: DECORFLEX-HD (Heavy Duty)

DECORFLEX-HD is a 2-component, highly abrasion resistant, load bearing waterproof "structural" coat.

**Elongation (ASTM D 412 - without mesh):**

23% @ 1/8" [120 mils] (3 mm), 1 coat

50% @ 160 mils (4mm), 2 coats

DECORFLEX-HD can be used as follows:

- Delivered in a pre-determined mix ratio, mix Component-A with Component-B completely. Do not mix partial units.

**1. Base Coat:** 1/8" - 1/4" (3 - 6 mm) thick base, top coated with "R", "F" and "UF" to achieve different textures.

Application Areas: Floors and walls.

Note: for spalled or deteriorated floors prime substrate with DECORFLEX-P (see above), prior to application of "HD".

**2. Finish Coat:** ~1/8" - 1/4" (3 - 6 mm) thick base and finish coat

Application Areas: Floors, walls, balconies, decks, stairs, et

Note: Prime substrates with DECORFLEX-P (see above) when temperatures are +80°F prior to application of "HD"

**Packaging:** 77 lb Unit (35 kg):

Component-A (powder): 55 lb (25 kg)

Component-B (liquid): 22 lb (10 kg)

**Consumption:** ~130 ft<sup>2</sup> @ 1/16" (12.0 m<sup>2</sup> @ 1.5 mm) per unit

~65 ft<sup>2</sup> @ 1/8" (6.0 m<sup>2</sup> @ 3.0 mm) per unit

~30 ft<sup>2</sup> @ 1/4" (2.8 m<sup>2</sup> @ 6.4 mm) per unit

### Top coat: DECORFLEX-R (Regular)

DECORFLEX-R is a 2-component, highly abrasion resistant, load bearing waterproof topping or base coat. It can be pigmented or stained. It can be applied directly to the substrate or over cured and dry "HD" to provide a smoother finish.

- Delivered in a pre-determined mix ratio, mix Component-A with Component-B completely. Do not mix partial units.

**Elongation (ASTM D 412 - without mesh):**

70% @ 1/16" [60 mils] (1 mm), 1 coat

**Packaging:** 5 gal Pail/46 lb Unit (21 kg):

Component-A (powder): 33 lb (15 kg)

Component-B (liquid): 1.5 gal/13 lb (5.7 L/6 kg)

**Consumption:** ~75 ft<sup>2</sup> @ 1/16" (6.9 m<sup>2</sup> @ 1.6 mm) per unit

### Top coat: DECORFLEX-F (Fine)

DECORFLEX-F is a 2-component, abrasion resistant fine granular wear coat. It can be pigmented or stained. It is only applied over cured and dry "HD" or "R".

- Delivered in a pre-determined mix ratio, mix component-A with component-B completely. Do not mix partial units.

**Elongation (ASTM D 412 - without mesh):**

70% @ 40 mils (1 mm), 1 coat

**Packaging:** 5 gal pail/30 lb (13.6 kg)

Component-A (powder): 20 lb (9.1 kg)

Component-B (liquid): 1.1 gal/10 lb (4.1 L/4.5 kg)

**Coating Thickness:** max: ~20 - 30 mils per coat

**Consumption:** ~145 ft<sup>2</sup> @ 20 mils (13.6 m<sup>2</sup> @ 0.5 mm) per unit

### Top coat: DECORFLEX-UF (Ultra Fine)

DECORFLEX-UF is a 2-component, abrasion resistant very fine granular wear coat. It is only applied over cured and dry "HD", "R" or "F".

It can be pigmented or stained.

- Delivered in a pre-determined mix ratio, mix Component-A with Component-B completely. Do not mix partial units.

**Elongation (ASTM D 412 - without mesh):**

80% @ 40 mils (1 mm), 1 coat

**Packaging:** 5 gal pail/30 lb (13.6 kg)

Component-A (powder): 20 lb (9.1 kg)

Component-B (liquid): 1.1 gal/10 lb (5.7 L/4.5 kg)

**Coating Thickness:** max: ~10 - 20 mils per coat

**Consumption:** ~250 ft<sup>2</sup> @ 10 mils (23.2 m<sup>2</sup> @ 0.25 mm) per unit

## Stains: DECORFLEX-STAIN

100% acrylic semi-transparent stains. Available in 12 standard colors. Additionally DECORFLEX can be integrally pigmented using DECORFLEX-CP color packs if desired.

## Sealer: DECORFLEX-SEALER-AC

DECORFLEX-SEALER-AC is a heavy duty, UV resistant, clear acrylic sealer.

**Packaging & Consumption:** 5 gal pail (18.9 L)

- 1st coat: ~200 - 300 ft<sup>2</sup>/gal (4.9 - 7.3 m<sup>2</sup>/L)

- 2nd coat: ~350 - 450 ft<sup>2</sup>/gal (8.6 - 11.0 m<sup>2</sup>/L)

## Sealer: DECORFLEX-SEALER-PA

DECORFLEX-SEALER-PA is a heavy duty, UV resistant, clear poly aspartic sealer.

**Packaging:** 5 gal pail

## CURING:

Self curing under normal conditions. Do not use water. It may discolor or pigmented applications during the fresh stage. However, provide suitable protection against extreme weather conditions while setting. In hot and very dry climates coating may become slightly tacky/sticky during the curing process. After 24 hrs after application mist coating with water to ensure complete hydration of material.

## SHELF LIFE:

Approx. 12 months when stored in unopened packaging, kept dry and frost-free.

## MISCELLANEOUS:

1. Do not expose the application to water during the setting time.
2. Expect prolonged setting and hardening time in rooms with high humidity, poorly ventilated areas and corners. The use of fans will accelerate the setting and curing time.
3. If application is exposed to intense sunlight work against movement of sun.
4. Cured DECORFLEX is physiologically and ecologically safe.
5. Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

## LIMITATIONS:

Do not use as an adhesive to install ceramic tile or natural stone. Do not use in lieu of a roofing membrane over occupied space in climates prone to freeze/thaw movement, or decks without properly placed movement or expansion joints (Contact AQUAFIN). Negative water pressure, if exposed to freezing, such as in above grade perimeter walls, can create spalling of the application or the exposed wall face.

## MAINTENANCE:

Mechanically damaged DECORFLEX can be easily repaired by thoroughly cleaning (sanding) the surface and reapplying a new coat of DECORFLEX.

**NOTE:** Installer is responsible for proper product application. Site visits by Aquafin personnel or representatives are solely for the purpose of making technical recommendations, not for providing supervision or quality control.

## SAFETY:

Refer to MSDS. A-Component (powder) contains sand (crystalline silica) and Portland cement and is highly alkaline (irritant) in contact with water. Prevent inhalation of dust before and during mixing with liquid Component-B. B-Component (liquid) contains no hazardous materials. Use rubber gloves and goggles during mixing and application. Avoid contact with eyes and skin. After contact with skin, wash with plenty of water. In case of eye contact, rinse immediately with plenty of water and seek medical advice. In case of handling large quantities, provide good ventilation if indoors.  
**KEEP OUT OF REACH OF CHILDREN.**

**Note:** the DECORFLEX Decorative Coating System is only available to applicators that have completed the applicator training classes. Please contact AQUAFIN for information regarding training costs and dates.

**LIMITED WARRANTY:** AQUAFIN, INC. warrants its products to be manufactured free of defects and to be consistent with its standard high quality. We will replace or, at our election, refund the purchase price of, any product which is proven to be defective, provided that the product was properly applied. Our product recommendations are based on Industry Standards and testing procedures. We assume no warranties either written, expressed or implied as to any specific methods of application or use of the product. AQUAFIN, INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. AQUAFIN, INC. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.