

# STRATUM HD400

High build epoxy floor coating

## DESCRIPTION

**STRATUM HD400** is an epoxy resin based, two component, solvent-free coat high build floor coating designed to provide a durable floor finish with excellent abrasion and chemical resistance. It is available in a wide range of colors to provide good aesthetics with an easy clean surface or positive grip aggregate finish, at a nominal thickness of 400 microns two layers coat

## USAGES

- On light, medium and heavy wear industrial areas such as factories, storage halls, loading ramps etc.
- On car parks, pedestrian walkways, power plants.
- On hygiene needed areas such as hospitals, laboratories, food industries etc.

## ADVANTAGES

- Excellent adhesion performance.
- Solvent free, safely used in interior surfaces.
- Excellent penetration ability due to low viscosity.
- Covers static cracks.
- Creates jointless and seamless surfaces.
- Provides smooth and decorative surface.
- Excellent chemical, mechanical and abrasion resistances.
- Can create a non-slip finish with the addition of anti-slip aggregate (Silica sand).

## TECHNICAL DATA

### STRATUM HD400

### Typical values

|                                      |                      |
|--------------------------------------|----------------------|
| Appearance                           | Liquid               |
| Solid Content                        | 100 %                |
| Mixed Density@25°C<br>(ASTM D1475)   | 1.6 kg/lit           |
| Pot Life @25-35°C<br>(ASTM D2471)    | 50-30 min.           |
| Touch Dry @25-35°C<br>(ASTM D2471)   | 6-8 hours            |
| Full Cure Time @25°C<br>(ASTM D1640) | 7 days               |
| Adhesion to Concrete<br>(ASTM D4541) | < 2.0 MPa            |
| Light Foot Traffic                   | 24 hours             |
| Tensile Strength<br>(ASTM D2370)     | 20 N/mm <sup>2</sup> |

## USAGE INSTRUCTIONS

### 1. Surface preparation

All substrates shall be sound, clean, free from dust, grease & oil, dirt, the concrete wet substrates should be sponged-dried to remove all free surface water.

Concrete floors should have compressive strength not less than 25 MPa. any old resin floor was applied shall be removed completely using a concrete grinding equipment, any cracks or grooves should be filled using **PIOMORTAR FC** before priming.

### 2. Priming

Surface must be primed with **PIOPRIME 38** 24 hours prior to application

### STRATUM HD400

### Coverage

PIOPRIME 38

9 m<sup>2</sup>/ liter/200 μ

STRATUM HD400

5 m<sup>2</sup>/ liter/200 μ

## STANDARDS

**STRATUM HD400** is formulated to comply with all requirements of ASTM D16.

### 3. Mixing

Stir component A only separately, then the entire content of component B could be poured into the base container, both should be mixed 3-4 min using mechanical mixer (drill mixer). Insufficient mixing may lead to color variation.

**MIX THE ENTIRE SET, AND DO NOT PARTIAL MIX THE COMPONENTS**

#### 4. Application

Transfer the mixed material into a suitable container for application, apply material using a short pile roller to achieve the required film thickness, it is recommended to apply two coats within 24 hours.

#### 5. Anti-slip surface application

The first coat shall be dressed by the chosen silica sand (anti-slip grains). The grain can be broadcast in a slight random dressing to provide a less dense finish. After the first coat has reached initial curing time, the excess aggregate should be removed from the surface, then apply the topcoat with medium texture roller, care should be taken to ensure that continuous film is achieved, and all grains are completely covered and coated by it.

#### 6. Curing

Allow **STRATUM HD400** to cure fully for 7 days before exposing to full mechanical objects or chemical substances.

#### 7. Cleaning

Clean all tools and application equipment with a suitable thinner immediately after use.

Hardened or cured material can only be removed mechanically.

## PACKAGING

**STRATUM HD400** is supplied in 24 kg set, component A & B.

**Yield:** 15 liters

## STORAGE & SHELF LIFE

**STRATUM HD400** shall be stored in its sealed container under dry and shaded place in a temperature from 5°C - 35°C, shelf life of the material is 12-months.

## TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:  
concretedoctor@arkaz.com

## LEGAL DISCLAIMER

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These products may be covered by patents or patents pending.

## CHEMICAL RESISTANCE

| STRATUM HD400     | Concentration |
|-------------------|---------------|
| Chlorine          | 100%          |
| Kerosene          | 100%          |
| Gasoline          | 100%          |
| Nitric Acid       | 20%           |
| Sulphuric acid    | 40%           |
| Detergents        | 100%          |
| Alum              | 100%          |
| Hydrochloric acid | 30%           |
| Sodium Hydroxide  | 50%           |
| Soda Solution     | 100%          |

## LIMITATION

Don't apply **STRATUM HD400** if:

- The temperature of the surface is below 5 °C or over 40 °C
- The flooring concrete compressive strength is less than 25 MPa
- Concrete surface particularly if new, should be fully cured with a maximum residual relative humidity (RH) of 75%

## HEALTH & SAFETY

Before applying **STRATUM HD400**, all safety protections should be worn during application, such as safety goggles and rubber gloves to avoid any harmful accidents.

If **STRATUM HD400** is splashed to skin, it must be washed off by water and soap at once, and if to the eyes seek medical attention immediately.

