# Hermetix

## colloidal silica concrete densifier



## **DESCRIPTION**

Hermetix is a colloidal silica based densifier for concrete polishing systems that transforms ordinary concrete surfaces into exceptionally durable, attractive, colorful floors. The concrete surfaces benefit from the Hermetix densifier, displaying an attractive floor finish with exceptional durability. It is recommended for concrete floors where beauty, durability and use of environmentally friendly materials are important. Concrete surfaces treated with Hermetix densifier achieve stunning visual and functional rejuvenation transforming them to colorful and expressive wear surfaces.

The colloidal silica in Hermetix is suspended in an aqueous base and stabilized electrostatically. It is a concentrated monodispersion with particle sizes ranging from approximately 5 to 100nm in diameter. The very-very fine particle size distribution in Hermetix allows for rapid surface penetration and the irregular variations in the surface area make rapid bonding with calcium hydroxide [Ca(OH)2] in the concrete possible.

## **ADVANTAGES**

- Hermetix has more reactive sites, so it goes to work quickly, within 1-2 minutes
- No brooming or working the material required
- It penetrates deeply and reacts more efficiently.
- No overnight curing required
- No caustic gel to scrub off; nothing to dispose off; the only residue may be a small amount of safe powder that can be vacuumed off during polishing phase
- No whitening potential
- Non-hazardous; zero VOC
- Low pH (~8.7)...safe to handle
- Does not trap free, migrating moisture in concrete slab
- Increases floor reflectivity, helping to reduce facility lighting and energy needs
- Fills the pore structure of the surface layer, making it denser and harder
- Increases stain and abrasion resistance

## **TYPICAL APPLICATION AREAS**

- Big box stores
- Warehouses / Distribution centers
- Shopping malls / Retail stores

- Factory floors
- Public buildings, schools
- Government and Private office buildings
- Residences Lofts, studios, contemporary living spaces

## SUBSTRATE REQUIREMENTS

- On or below grade installation must have an efficient vapor barrier under the slab (min 10-15 mil).
- Moisture vapor transmission must be less than 3lb per ASTM F1869 and less than 80% RH per ASTM F2170 unless Duraamen moisture mitigation system is used.)
- Remove all sealers, paints, wax, coatings, floor coverings and their mastics as well as any surface contaminants such as oil or food spills
- Non-moving cracks and control joints must be routed, cleaned and filled with Përdure EJF
- Concrete surfaces to be polished require a hard steel trowel finish (3 passes)during placement
- Minimum compressive strength of concrete 3500psi

#### COMPOSITION

■ Amorphous silicon dioxide (SiO²)

## **COLOR SELECTION**

■ Hermetix is available in CLEAR formulations only

#### INSTALLATION

- Use 1 part Hermetix to 4 parts of potable water
- Apply with pump sprayer to saturation, a maximum rate of 500ft2 per gallon
- Let floor dry, approximately one hour, and commence with polishing/burnishing process

For complete installation instructions, contact your Düraamen representative.

## **CLEAN UP**

Clean skin with soap and water. Consult MSDS for safety and health precautions.







#### COVERAGE

Hermetix yields 500 ft2 per gallon.

## **AVAILABILITY**

Hermetix is available throughout the United States and Canada. Contact Düraamen representative in your area for details.

## **MAINTENANCE**

After completing the application of Hermetix the installer should provide the owner with maintenance instructions. The floor treated with Hermetix needs to be cleaned regularly Hermetix cleaner. Frequent and continued use of this treatment ensures satisfactory long-term performance. Good house keeping practices, such as regular mechanical sweeping, scrubbing and wet mopping will increase the life expectancy of the flooring surface.

#### **TECHNICAL SERVICE**

Düraamen Engineered Products, Inc. provides services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces.

## TECHNICAL DATA

Flash point	None
Odor	None
Film forming	None
Volatile Organic Content	0 gm/L
Reflectance	Up to 35%
Weathering	No adverse effect to ultraviolet light

#### WARRANTY

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