



# DIAMOND-PLATE

**NON-OXIDIZING, HEAVY DUTY METALLIC FLOOR HARDENER**

**EUCLID CHEMICAL**

DRY SHAKE FLOOR HARDENER

DIAMOND-PLATE

MASTER FORMAT #: 09 09 09

## DESCRIPTION

**DIAMOND-PLATE** is a metallic, dry shake floor hardener with graded, non-oxidizing metallic aggregate in a high strength cementitious binder. Designed to be incorporated into fresh concrete slabs, **DIAMOND-PLATE** provides a dense, tough surface capable of withstanding the abrasion and impact loading seen by floor slabs of numerous industrial and manufacturing facilities. **DIAMOND-PLATE** has been specially formulated with a non-rusting aggregate for increased abrasion resistance in areas subject to frequent moisture or water exposure. **DIAMOND-PLATE** can also be mixed in a mortar consistency and placed along joints to provide edge reinforcement.

## PRIMARY APPLICATIONS

- Industrial floors
- Loading docks
- Warehouses
- Main, high traffic aiseways
- Processing plants
- Passenger and freight terminals
- Towveyors
- Distribution centers
- Joint shoulder reinforcement

## FEATURES / BENEFITS

- Provides a high strength wearing surface in areas subject to constant or frequently wet conditions without oxidizing
- Results in a surface up to 6 times as abrasion resistant over plain cured concrete
- Metallic aggregate is free of rust, oil, or other contaminants
- Dense surface resists penetration of oil, grease, and many other liquids
- Virtually non-dusting in service, easy to clean and maintain
- Can be applied at coverage rates up to 14.6 kg/m<sup>2</sup>
- Available in 10 standard colors including a natural cement color

## TECHNICAL INFORMATION

### Typical Engineering Data

**Compressive Strength:** ASTM C 109, 25mm cubes  
Mixed at 2.04 kg of water per 25kg bag

Age	Strength MPa
7 days	75.9
28 days	89.7

**Appearance:** **DIAMOND-PLATE** is a free flowing powder as packaged. It is available in the following colors: natural concrete gray (standard), tile red, terra cotta, black, diamond green, french gray, battleship gray, light gray, brown and tan. The final finish can be any texture normally achieved with concrete and should be specified by the owner. In addition, the joints of the newly installed Diamond-

Plate floor can be filled with a matching color available in the EUCO QWIKJOINT UVR polyurea joint filler product.

Age	Relative Abrasion Resistance ASTM C 779	
	Abrasion @ 30 min.	Abrasion @ 60 min.
7 days	0.33mm	0.97mm
28 days	0.30mm	0.86mm

## PACKAGING

**DIAMOND-PLATE** is packaged in 22.7kg bags with polyethylene liners for moisture protection.

## SHELF LIFE

2 years in original, unopened package.

## COVERAGE

**DIAMOND-PLATE** may be applied at rates from 4.9 to 14.6 kg/m<sup>2</sup>. Greater application rates yield better total abrasion resistance, and may be used with special considerations. Contact your Euclid Chemical Company representative for recommended procedures.

## SPECIFICATIONS/COMPLIANCES

Canadian Food Inspection Agency

## DIRECTIONS FOR USE

The contractor and engineer are encouraged to consult and review the Euclid Chemical bulletin “**Dry Shake Floor Hardeners - Application Instructions**”. The document offers instructions detailing the general installation of Euclid Chemical manufactured dry shake floor hardeners. **Note:** If the contractor is not familiar with the standard application techniques of a dry shake floor hardener, a pre-job meeting is suggested to review the project concrete mix design as well as placement and curing details unique to the particular job. Contact your local Euclid Chemical Company representative for additional information.

**Armored Joints:** DIAMOND-PLATE may also be used as a mortar in constructing armored floor joints.

**Application Tips:** Colored (pigmented) dry shakes require special attention for a uniform color. Care should be taken with regard to the following; delay application of the shake as long as possible to get the maximum color saturation at the surface of the slab, apply the shake as evenly as possible and in two applications for maximum uniformity, do not burnish trowel the floor. Best appearance is achieved by hand trowelling the final finish.

**Curing and Sealing:** After finishing operations are complete and the surface will not be marred by foot traffic, apply a Euclid Chemical curing compound or cure and seal according to product instructions. To produce an exceptionally durable and dustproof surface, cure with a dissipating or removable curing compound such as KUREZ DR VOX or KUREZ RC, then seal with EUCO DIAMOND HARD or ULTRASIL Li+.

## CLEAN-UP

Clean tools and equipment with soap and water before material hardens.

## PRECAUTIONS / LIMITATIONS

- The use of supplementary cementitious materials are not recommended for use with a dry shake hardener
- Proper curing and sealing is required.
- Curing with a sheet membrane (poly or burlene) is acceptable, however potential mottling problems may occur.
- Sufficient labor is required to produce consistent results on large placements.
- Important: Air-entraining admixtures may complicate finishing operations and cause blistering. Contact The Euclid Chemical Company if applied over air entrained concrete with more than 3% total air content.
- Not recommended for floors subjected to acids or other corrosive chemicals that may attack a cement based material.
- Store product in a dry place.
- In all cases, consult the Safety Data Sheet before use.

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