# THE EUCLID CHEMICAL COMPANY



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# **DIAMOND-PLATE**

# NON-OXIDIZING, HEAVY DUTY METALLIC FLOOR HARDENER

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**DIAMOND-PLATE** is a dry shake, metallic 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. DIA-MOND-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. Other colors are available in addition to the standard natural color.

## **PRIMARY APPLICATIONS**

- Industrial floors
- Warehouses
- Processing plants
- Passenger and freight terminals
- Vehicle maintenance shops
- Loading docks
- Main, high traffic aisleways
- Towveyors
- Distribution centers
- Joint shoulders reinforcement

# **FEATURES/BENEFITS**

- Provides a high strength wearing surface in areas subject to constant or frequently wet conditions without oxidizing.
- Gives up to 6 times the abrasion resistance of 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.
- Economical to own over the life of the floor.
- Can be applied at coverage rates up to 3.0 lb/ft² (14.6 kg/m²).
- Available in 8 standard colors.

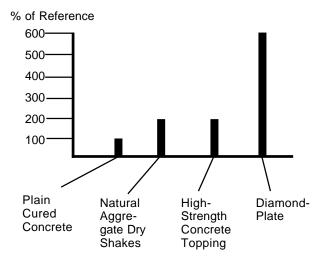
# **TECHNICAL INFORMATION**

# Typical Engineering Data Compressive Strength

ASTM C109, 2" (50 mm) Cubes

<u>Age</u>	<u>Strength</u>	
1 day	4,000 psi	(27.6 MPa)
3 days	5,000 psi	(34.5 MPa)
7 days	7,000 psi	(48.3 MPa)
14 days	9,000 psi	(62.1 MPa)
28 days	10,000 psi	(69.0 MPa)

# RELATIVE ABRASION RESISTANCE <u>ASTM C 779 Maximum Ranges</u>



**Appearance**-DIAMOND-PLATE is a free flowing powder as packaged.

The final finish can be any texture normally achievable with concrete and should be specified by the owner.

#### COVERAGE

DIAMOND-PLATE may be applied at rates from 1.0 - 2.5 lb/ft² (4.9 - 12.2 kg/m²). Higher application rates yield better total abrasion resistance. Greater application rates may be used with special considerations. Contact your Euclid Chemical Company representative for recommended procedures.

#### **PACKAGING**

DIAMOND-PLATE is packaged in 50 lb (22.7 kg) bags with polyethylene liners for moisture protection. Material is shipped 64 bags per pallet.

## **DIRECTIONS FOR USE**

The contractor and engineer are encouraged to consult and review the Euclid Chemical bulletin "Application Instructions- Dry Shake Floor Hardeners". 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. These joints provide added wear resistance at joint edges increasing the serviceable life of the floor. Consult The Euclid Chemical Company for recommended procedures and ratio of usage.

In addition to the information in "Application Instructions-Dry Shake Floor Hardeners", the contractor should consider the following when installing DIAMOND-PLATE:

**Colored (pigmented) dry shakes** require special attention for a uniform color. If the job involves placement of colored DIAMOND-PLATE, care should be taken with regards to the following.

- a.Delay application of the shake as long as possible to get the maximum color saturation at the surface of the slab.
- b. Apply the shake as evenly as possible and in two applications for maximum uniformity.
- c.Do not burnish trowel the floor. Best appearance is achieved by hand trowelling the final finish.

**Curing and Sealing-**The following products are recommended for curing and sealing DIAMOND-PLATE. Each has its own advantages and unique properties. Consult the individual technical data sheet for each curing and sealing product or contact your Euclid Chemical Company representative for a recommendation regarding your specific project.

# **CURING**

Solvent Based
SUPER FLOOR COAT 1
SUPER DIAMOND CLEAR
SUPER FLOOR COAT COLORED
V.O.C. Compliant
SUPER DIAMOND CLEAR VOX
SUPER AQUA-CURE VOX
KUREZ DR VOX 1,2

#### **SEALING**

**Solvent Based** 

SUPER FLOOR COAT 1
SUPER FLOOR COAT COLORED

V.O.C. Compliant

FLOOR SEAL VOX

**EUCO DIAMOND HARD** 

- <sup>1</sup> Do not use these products on colored surfaces.
- <sup>2</sup> If the floor surface will later be frequently exposed to solvents, hydraulic fluid etc. cure the floor with either polyethylene sheeting or with KUREZ DR VOX applied at 400-500 ft²/gal (9.8-12.3 m²/liter). After 6-8 weeks exposure to traffic and sunlight, the KUREZ DR VOX may be removed with mechanical scrubbers. Seal the floor with EUCO DIAMOND HARD penetrating sealer. Fast track projects may be cured and sealed with EUCO DIAMOND HARD. Consult individual product data sheets for suitability and application information.

# **CLEAN-UP**

Clean tools and equipment with water before the material hardens.

Shelf life is 2 years in original, unopened package.

## PRECAUTIONS/LIMITATIONS

- Proper curing and sealing is required.
- Curing with a sheet membrane (poly or burlene) is acceptable, however potential mottling problems may occur.
- Sufficient manpower is required to produce consistent results on large placements.
- Air-entraining admixtures may complicate finishing operations and cause blistering. Contact The Euclid Chemical Company if application of this product will be 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.



Form Diamond-Plate-1.01