

# Concrete Admixtures and Fiber

# **IMIPLATE 1100 MC**

Dry-shake, Metallic Aggregate Colored Surface Hardener

### **DESCRIPTION**

IMIPLATE 1100 MC is a ready-to-use colored surface hardener. When evenly placed on freshly floated concrete, it provides additional abrasive/wear resistance with an enhancing color.

### USE

IMIPLATE 1100 MC is recommended for industrial floors subject to heavy traffic and industrial applications for impact resistance such as warehouses, loading docks, tow-veyors, etc.

### **ADVANTAGES**

- Wear/abrasion resistance is increased 800% over standard concrete and 400% over natural aggregate hardeners
- Impact resistance is twice that of standard concrete
- Density up to seven times that of natural concrete
- Application rate is as high as 3 lbs./ft.2(14.6 kg/m2)
- Long-lasting color; integral color eliminates the cost of painting
- Provides a non-dusting floor

### **APPLICATION**

**Coverage:** Coverage: 1 to 3 lbs./ft.<sup>2</sup> (4.88-14.6 kg/m<sup>2</sup>)

As a general guide to floor and slab construction, refer to American Concrete Institute Standard 302. All work should be done under roof if at all possible. Job conditions that affect drying/setting time also affect the hardener application time. Use experienced workmen for the job size.

**Tools and equipment required:** For most applications, a mechanical spreader that drops the dry shake directly onto the fresh concrete is recommended. For hand spreading, use a work bridge. Use wood bull floats. These are an aid to prevent crusting. Finishing machines use float blades, not combination blades. Use a 1/8"(.3 cm) radius tool for edges and joints. Consult IMI Mix Design and Application Guidelines before construction.

**<u>Preparation:</u>** Calculate the number of bags required for a given area as per the coverage rate required. Place concrete to finish grade level and compact with a wooden bullfloat.

**Special Conditions:** When slab is subjected to any condition that causes rapid surface drying such as wind, sunlight, etc., spray IMIFILM to surface just after bullfloating.

# INTERNATIONAL MATERIALS INDUSTRIES, L.L.C.

2800 N. Johnson St\*New Orleans, Louisiana 70117 \* PHONE: (504) 267-3344 \* Fax: (504) 267-3345

The information herein is to assist customers in determining whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability, nothing herein shall constitute a warranty, express or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special, incidental or consequential damages.

**Placing:** Application of the hardener depends on: slump of concrete, job site conditions affecting drying and the coverage of the hardener. Perimeter sets quicker than interior. Be aware of this and apply to edges first. Dry-shake surface hardeners are designed to be placed after bleeding. Apply 2/3 of coverage ratio on first application. Allow the dry-shake to darken, absorbing moisture from the slab, then wood bull float or machine at the appropriate time. Immediately follow with the remaining 1/3 and machine float. Final finish after the slab stiffens. To achieve maximum appearance and performance, float and finish the dry-shake so as to maintain the material on the top surface of the slab, fully integrated into the base concrete. Edges should be worked by hand keeping trowel as flat as possible. Blistering can occur when trowel blades have been raised too early. Retrowel with blades lowered to remove blisters.

DO NOT add water to aid in finishing. This will weaken the surface. A hard troweled surface is recommended. DO NOT burnish, over trowel, or use magnesium tools with light reflective or light colored hardeners. Cure only with IMI curing compounds recommended for this type of hardener.

### **COMPOSITION**

**Color:** Battleship Gray, French Gray, Tile Red, Terra Cotta and Nile Green.

### PACKAGING

50 lb. triple lined bag (22.7 kg)

### LIMITATIONS

DO NOT place at temperatures below  $40^{\circ}F(5^{\circ}C)$  or if the temperature is expected to fall below  $40^{\circ}F(5^{\circ}C)$  in the next twenty-four hour period. DO NOT use dry-shake hardeners where floor will be exposed to any material, such as acid, or other material known to attack Portland Cement. Slump should not exceed 4"(10.16 cm). DO NOT use any air entrainment. Total air in concrete mix should not exceed 3%. DO NOT use calcium chloride or aggregates contaminated by salt water.

## **STORAGE**

IMIPLATE 1100 MC should be stored in a cool, dry interior area. At no time should material be exposed to high moisture, rain or snow conditions