



ISO 9001: 2000

# CICO SURFACE HARDENER

Metallic Compound Long Wearing Abrasion Resistant

- DESCRIPTION** : It is a specially manufactured non-ferrous aggregates with cement and stone/granite chips to provide the hardest surface to floorings, paving which will remain wearproof, dustproof, waterproof and greaseproof.
- USES** :
- : By the use of **CICO SURFACE HARDENER**, the flooring and paint topping can be made wear and dustproof. It is ideally suited for use in all types of industrial floors which are subjected to heavy trucking and load movement.
  - : It can withstand the impact load due to movement of heavy load over the floor topping.
  - : It does not allow any dampness or absorption of water and easy to clean by washing as the surface remains smooth without any hole or crevice etc.
- ADVANTAGES** :
- : Wherever the flooring is subjected to high abrasion due to the movement of steel wheels, heavy truck, fork lift or any other movement of heavy machineries, the surface can be made dustproof, dampproof, with the use of **CICO SURFACE HARDENER**.
- SPECIFICATIONS** :
- : The **CICO SURFACE HARDENER** should always remain dry until it is being used with the cement and/or floor concrete. Ordinary portland cement, conforming to Indian standard specifications should always be used in preference to rapid hardening cement. Even the blast furnace slag cement or portland pozzolana cement can also be used provided the quality of cement is good.
- The concrete to be used in the floor toppings should have clean, angular crushed granite or quartzite stone chips of size 6mm down. The water should be added to minimum quantity so as to maintain a very low water cement ratio.
- COMPOSITION OF TOPPING** :
- A) **For Heavy Duty Floors:** 1 part of **CICO SURFACE HARDENER** to 4 parts cement by weight with 2 parts of 6mm down stone chips should be the normal mix proportion. Firstly **CICO SURFACE HARDENER** and the cement should be mixed thoroughly in a dry state. Then the 2 parts of stone chips is to be mixed with the mixed material and again mix thoroughly. After the thorough mixing of the dry material, necessary amount of clean fresh water is to be added to have a workable consistency for properly placing and compacting the floor topping.
  - B) **For Light Duty Floors:** 1 Part of **CICO SURFACE HARDENER** and 5 parts of cement by weight and 2 parts of 6mm down stone chips is the normal mix proportion. The mixing procedure should be same as mentioned under the heading for Heavy Duty Floors.
- COVERAGE/DOSE** :
- Heavy Duty Floors** : 2 kg of **CICO SURFACE HARDENER** will cover 1 sq.m. for 13mm thick floor topping.
  - Light Duty Floors** : 1.5 kg of **CICO SURFACE HARDENER** will cover 1 sq.m. for 13mm thick floor topping.

- APPLICATION** : a) **On New Work:**  
After laying a concrete base of 100mm to 150mm, a granolithic layer of approximately 38mm is to be followed. Over the granolithic layer **CICO SURFACE HARDENER** topping of a thickness of 13mm to 19mm is to be laid, leveled and finished. The topping should always be laid over the granolithic surface when it remains wet. When the initial set of the floor topping takes place, the surface is to be trowled off to a polished smooth finish. In large projects where it is possible lay the floor in single operation the granolithic layer can be dispensed with. Surface Hardener topping should be laid when the base layer remains wet and finished by means of trowelling to a polished smooth surface.
- b) **On Old Work:**  
Remove the old concrete surface to a depth of at least 5mm to 7mm and clear all loose particles and dust. The clean surface to be thoroughly soaked with water for at least 12-15 hours prior to laying of the concrete base and floor topping. No surface water should be remain before the application of the cement slurry over the surface. Apply cement slurry over the entire surface and lay the ordinary granolith 13mm to 19mm thickness. Over the already laid granolith, lay **CICO SURFACE HARDENER** topping to the required thickness. When the underlying granolith layer is still wet, trowell off to a smooth polished smooth surface.

**PRECAUTION** : Proper surface preparation is the essence of proper **CICO SURFACE HARDENER** floor topping. Mixture of dry cement and sand or even dry cement should not be sprinkled over the wet surface for finishing purpose. The final trowelling should not be resorted till the initial set has taken place. The **CICO SURFACE HARDENER** topping should be kept damp with the wet gunny bags for a minimum period of 5 to 7 days. The **CICO SURFACE HARDENER** topping should be laid by a very skilled mason/workman who has knowledge about laying this type of floor topping. For finishing purpose, the steel trowell should always be used. With the use of **CICO SURFACE HARDENER** the setting time of cement does not change.

**PACKAGING** : Available in 50 kg bags.

**HEALTH & SAFETY** : Non-toxic, Non-flammable, Eco-friendly.

**PRODUCT INFORMATION** Although the basic formulation of our products generally remains unchanged. Production refinements arising from continuing research and evaluation program may occasionally results in marginal changes in properties.

**TECHNICAL SERVICE**

- \* **CICO** maintains a technical division with highly qualified Technical Personnel to investigate and advise on subjects related to concrete and the construction industry. The Division will advice on the correct use and selection of right products at the right place.
- \* **CICO** undertakes Consultancy Service for diagnosis and rehabilitation of distressed structures
- \* **CICO** undertakes jobs as a package for total waterproofing system with guarantee

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## **CICO TECHNOLOGIES LIMITED**

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