

MONNELI BETOHARD D

Dry Shake Floor Hardener

Product Description

A blend of hydraulic binder, special aggregates and selected additives to provide optimum performance when applied to fresh concrete floors. BETOHARD D will provide continuous protection to concrete floors against wear, impact and abrasion. In addition, it provides a high resistance to various industrial flooring against chemicals, oils, greases, detergents and hydraulic fluids found in the aviation industry.

BETOHARD D is applied by dry shake method to ensure that top hard wearing surface bonds monolithically to the concrete flooring.

Uses

BETOHARD D provides a hard surface to concrete toppings in variety of hard wearing surfaces such as:

- Car parks
- Car washes on new concrete floors in
- warehouses
- Factories
- Power stations
- Shipyards
- Military establishments
- Airport
- Other flooring areas where hard abrasion and impact resistant surfaces is required

Advantages

- Premixed, ready to use offering factory controlled quality assurance
- Ease of application
- High abrasion resistance
- High impact resistance

- Non dusting surface
- Non-oxidizing
- Slip-resistant finish can be obtained
- High resistance to petroleum based products
- For internal and external use
- Economic installation

Instructions for Use

Surface Preparation

Use a placable and finishable non-bleeding concrete mix of required strength design, with a minimum slump of 75 mm and not more than 3% entrained air. The surface is then floated with a wooden or aluminum float. After casting, any bleeding water from the concrete should be removed.

Sprinkle BETOHARD D along edges of bags (approx. 100 mm strips) where expansion and contraction joints will be located first. Float into surface using a wooden float.

As soon as the concrete is firm enough to support the weight of the workman, apply the first shake of BETOHARD D.

Use up to 2/3 of the total shake mix in the first application. Treat areas adjacent to walls and columns first. Spread the material evenly by sprinkling at right angles in two passes close to the floor level.

Allow applied material to absorb moisture from the concrete surface. Uniform darker color will be apparent.

Using a wooden float, float BETOHARD D into the concrete ensuring material becomes an integral part of the surface.

Follow second floating immediately after first floating. Employ the balance of the material, follow promptly with second floating using wood or aluminum float or power float in case of large areas.

A third power floating may follow for added compaction, if required.

Note: If coarse non-slip finish is required, do not proceed with further floating or trowelling operations after second floating but allow the surface to cure.

Curing

Curing should be carried out immediately after the final trowelling operation has been completed. It can be done by either covering with wet Hessian cloth and Polythene sheets or by the application of curing compound. Immediately after removing Polythene sheet sweep the floor to remove any dust or loose particles.

Cleaning

Tools and equipment should be cleaned with water immediately after use. Spillages should be absorbed with sand or sawdust and disposed of in accordance with local regulations.

Hardened materials should be removed mechanically

Recommendations

- Ensure that enough labor, machinery and material is available to complete treating the whole area before concrete dries.
- Do not use BETOHARD areas exposed to acids
- In case of coloured floor, test a small area of floor to ensure the color integrity

Packaging

BETOHARD D is supplied in 25 kg bags.

Consumption

Light and medium duty : 3 – 5 kg / m²

Heavy duty : 5 – 7 kg / m²

Joints (expansion) : 1.5 kg in 8 cm strips

Technical Data

Properties	Results
Color	Cement grey, red, brown, green, black
Compressive strength at 28 days (ASTM C579)	>70 N/mm ²
Flexural strength at 28 days (ASTM C580)	>11 N/mm ²
Abrasion resistance (ASTM D4060)	742.2 mg
Staining	Resistant to petrol, automotive, lubricating oils, aviation lubricating oils, kerosene, hydraulic brake fluid.

All values are subject to 5-10 % tolerance

Storage

Keep the product in a dry covered place into original well closed packaging. Shelf life is 6 months from date of production if stored properly.

Health & Safety

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary. In case of contact with skin, rinse with water and again wash thoroughly with soap and water.

In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting.

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DUBAI
ABU DHABI
KSA
ITALY

P.O. Box 123808 Dubai UAE
P.O. Box 127326 Abu Dhabi, UAE
P.O. Box 335896 Code: 11383 - Riyadh KSA
Z.I. Ponte d'Assi 06024 Gubbio (PG)

T. +971 4 8803488 F. +971 4 8803450
T. +971 2 5511949 F. +971 2 5511749
T. +966 1 2654277 F. +966 1 2654335
T. +39 75 9221297 F. +39 75 9221174

colmef@colmef.ae

www.colmef-me.com

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