



PolyFloor M HD

Heavy Duty Metallic Floor Hardener

DESCRIPTION

PolyFloor M HD is a dry shake, metallic floor hardener with cleaned and graded iron aggregate in a high strength cementitious binder. Designed to be incorporated into fresh concrete slabs. PolyFloor M HD provides a dense, tough surface capable of withstanding the abrasion and impact loading seen by floors slabs of numerous industrial and manufacturing facilities.

PolyFloor M HD has been specially formulated to be applied at heavy application rates which exceed those of standard or other first generation metallic hardeners.

TECHNICAL DATA

Physical Appearance	Grey Colour Powder		
Abrasion Resistance	Treated concrete will give 500 – 600 % better than control concrete	Coverage, kg/m ²	2.5 - 7.5 kg/m ² Depending on the degree of protection required

APPLICATIONS

- Industrial Floors
- Warehouses
- Processing plants like fertilizer/petrochemical units
- Passenger and freight terminals
- Vehicle maintenance shops
- Loading docks
- Main high traffic aisle ways/gangways
- Steel plants and textile units
- Distribution centers
- Machine shops
- Breweries and bolting plants



ADVANTAGES

- Provides a high strength wearing surface
- Gives up to 8 times the abrasion resistance of plain, cured concrete
- Easy to clean and maintain
- Iron aggregate is free of rust, oil and non ferrous material
- 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 from 2.5 – 7.5 kg/m² depending on the degree of protection required

APPLICATION METHODOLOGY

- These directions are to be followed for application of PolyFloor M HD on well designed, non air entrained concrete mixes. If unusual conditions exist, such as direct hot sun, high winds, low humidity or cold weather.
- Special attention should be given to a well compacted and level sub grade. A sub grade that is not well compacted could cause cracking in the slab. Follow the specification for use reinforcing bars or welded wire mesh
- Do not use calcium chloride or calcium chloride based admixtures in the concrete. The finished floor must be cured and sealed immediately after finishing, to prevent oxidation of the PolyFloor M HD surface. Keep air content of the concrete below 3%. Do not use air entraining admixtures. Minimum cement content or base concrete should be 300 kg/m³ and slump while pouring should be 50 mm to 70 mm. Check the specification for the amount of hardener required per square meter than stack the correct number of bags at each bay to be placed that day. This is important because it gives the finishers a “gauge” for applying the correct amount of material

After the above conditions have been met, proceeds with work in the following manner:

- Place minimum 50 mm thick concrete between screed points and strike off to level of finished floor. Use PolySlip on side shuttering. Pour minimum 100 mm concrete in case of vacuum dewatering
- Use bull float or darby to level surface. Allow the slab to bleed. To remove bleed water, drag surface with a burlap or rubber hose
- After the concrete has stiffened to the point of supporting floating operations, open the surface by hand floating or power floating. Normally, a finisher’s footprint of 6.4 mm to



9.5 mm in dept indicates that the slab is ready for power floating. Earlier floating of slab edges by hand is strongly recommended since edges will dry first

- For best results and uniformity of thickness, PolyFloor M HD should be applied in two shakes using approximately two- third of the total amount for the first shake. For heavier applications, use three shakes of PolyFloor M HD
- Immediately after the slab surface has been opened by floating, apply the first shake in a uniform application by hand, spreader or other suitable method
- Allow the first shake to remain unworked on the surface, until it has absorbed moisture and achieved a dark uniform colour. Then float with hand or power float. Then immediately apply second shake, applying it to the edges first.
- After second shake has observed its moisture, float in the same manner as outlined above working the edges first, then cross floating for a level, uniform surface
- First Steel Troweling: Flat troweling should be done, keeping the trowel flat and only after the surface has become dull
- Final Steel Troweling: When the surface has set sufficiently so that no additional water or lines are brought to the surface, a second and final troweling should be given to the floor. During this operation the trowel should be slightly raised to give a hard and smooth finish. Continue troweling process until the desired surface finish is achieved
- Curing and Sealing for PolyFloor M HD: Choose PolySuperRezseal to apply on the surface, in accordance with label instructions.

HEALTH AND SAFETY

- Use mask, nose cover and hand gloves during application and clean hands with soap water after application. Ensure adequate ventilation and avoid inhalation of dust

PACKAGING

Available in 50 kg bag.

STORAGE

Must be stored in original packing at ambient temperature, dry place under shed away from heat.

SHELF LIFE

If stored in original unopened sealed under the above conditions, it has a shelf life of 9 months.