

# Ozone Hardtop M

Heavy duty metallic floor hardener for fresh concrete

<b>Description</b>	Ozone Hardtop M is ready to use, dry shake, metallic floor hardener with graded iron aggregate in a high strength cementitious binder. Designed to be incorporated into fresh concrete slabs Ozone Hardtop M provides a dense, tough surface capable of withstanding the abrasion and impact loading of industrial and manufacturing facilities. Ozone Hardtop M is also used to construct iron armored joints to protect and reinforce joint shoulders in heavy traffic areas.									
<b>Uses</b>	<ul style="list-style-type: none"><li>▪ Industrial floors</li><li>▪ Loading docks</li><li>▪ Warehouses</li><li>▪ Main, high traffic aisle ways</li><li>▪ Processing plants</li><li>▪ Passenger and freight terminals</li><li>▪ Towveyors</li><li>▪ Distribution centers</li><li>▪ Iron armored joints</li></ul>									
<b>Advantages</b>	<ul style="list-style-type: none"><li>▪ Highest wear resistance.</li><li>▪ Antistatic performance.</li><li>▪ Achieves roughly 6 times the abrasion resistance of plain, cured concrete</li><li>▪ Iron aggregate is free of rust, oil, or other contaminants</li><li>▪ Dense surface resists penetration of oil, grease, and many other liquids</li><li>▪ Virtually non-dusting in service</li><li>▪ Easy to clean and maintain</li><li>▪ Economical to own over the life of the floor</li><li>▪ Can be applied at coverage rates up to 5 To 10 kg/m<sup>2</sup></li><li>▪ Available in 8 standard colors</li></ul>									
<b>Standard compliances</b>	BS 8024, BS 2050, DIN 5193									
<b>Properties</b>	Form	Powder								
	Color	Grey (Other colors are available on request)								
	Density(g/cc)	1.8±0.01								
	Compressive Strength	70 N/mm <sup>2</sup> @28 days								
	Moh Hardness	7(steel score)								
	Minimum abrasion Resistance achieved	220								
<b>Packaging</b>	25 kg bag									
<b>Storage</b>	Store in dry and cool place below 35°C. Protect from direct sunlight.									
<b>Shelf life</b>	12 months if stored properly in original unopened packaging.									
<b>Instruction for use</b>	<p><b>Base Concrete Requirements:</b></p> <table><tr><td>Minimum compressive strength</td><td>30 N/mm<sup>2</sup></td></tr><tr><td>Minimum cement content</td><td>300 kg/m<sup>3</sup></td></tr><tr><td>Minimum slump</td><td>75 to 90 mm</td></tr><tr><td>Maximum air content</td><td>3%</td></tr></table> <p>It is recommended to add a suitable Ozone concrete admixture to improve its properties.</p> <p><b>Placing:</b></p> <p>The concrete slab is ready for the Ozone Hardtop M when a thumb pressed hard onto the surface only leaves a 'print' of about 3 - 5 mm depth. Broadcast the mix evenly by hand or with a suitable spreading device. Apply approximately 5 to 10 kg/m<sup>2</sup> in two applications. With manual application the surface bleed water should be removed or allowed to evaporate and Ozone Hardtop M should be sprinkled onto the screeded concrete evenly in 2 stages: (1st stage 5-6 kg/m<sup>2</sup>, 2nd stage 3-4 kg/m<sup>2</sup>). Care should be taken to apply the powder so as to avoid creating ripples etc. in the concrete surface. Casting Ozone Hardtop M powder carelessly or further than 2 meters from point of casting will reduce the consistency of finish. Wait until the Ozone Hardtop M has been evenly moistened by the water in the concrete. The first stage should be worked into the slab using a low speed mechanical trowel, held perfectly flat, followed immediately with the sprinkling on of the second measurement of Ozone Hardtop M. Ozone Hardtop M results in the slab surface becoming stiff more quickly than usual. Careful trimming should take place along the edges where adjoining slabs are to be poured. Final finishing to close pores and remove undulations can be achieved either by hand or power trowel.</p> <p><b>Note:</b> If parts of the surface come loose or if the laitance rises, this means the concrete is still too fresh.</p>		Minimum compressive strength	30 N/mm <sup>2</sup>	Minimum cement content	300 kg/m <sup>3</sup>	Minimum slump	75 to 90 mm	Maximum air content	3%
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**Smoothing:**

As soon as the plasticity or initial set allows, perform preliminary smoothing with the same machine running at low speed but equipped with metal smoothing blades, set at a minimum angle. Any final smoothing required should be performed later with the machine running at high speed. Can be finished with manual way also.

**Joints:**

Contraction joints, expansion joints and floor joints should be saw-cut only after 24 hours. When the slab has hardened, the joints can be filled with the appropriate sealant in accordance with the floor requirements

**Curing:**

Proper curing and sealing is required. Sufficient manpower is required to produce consistent results on large placements. To make more dense and water resistant apply Ozone PU Sealer as a curing compound on fresh concrete(coverage 8-10 m<sup>2</sup>/Ltr).

**Coverage:**

Light traffic	3kg/m <sup>2</sup>
Medium Traffic	5kg/m <sup>2</sup>
Heavy Traffic	10kg/m <sup>2</sup>

**Cleaning & disposal**

Clean tools and equipment with soap and water before material hardens. Do not dispose off into water or soil but according to local regulations.

**Precautions & Limitations**

Air-entraining admixtures may complicate finishing operations and cause blistering. Contact the Ozone company if application of this product will be over air entrained concrete with more than 3% total air content.

**Health & safety**

Ozone Hardtop M is alkaline and should not come into contact with skin and eyes. Avoid inhalation of dust during mixing. Gloves, goggles and dust mask should be worn. If contact with skin, wash with water. Splashes to eyes should be washed immediately with plenty of clean water medical advice sought.

**WARRANTY:** Ozone products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale. Ozone makes no warranties, implied or otherwise, as to the merchantability or fitness for ordinary or particular purposes of its products and excludes the same. If any Ozone product fails to conform with this warranty, Ozone will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made period from the date of the claimed breach. Ozone does not authorize anyone on its behalf to make any written or oral statements which in any way alter Ozone's installation information or instructions in its product literature or on its packaging labels. The user of the Ozone products must test the products for suitability for the intended application and purpose before proceeding with the full application of the products.