



HARDCRETE

CONCRETE HARDENING & WATERPROOFING LIQUID

PRODUCT DESCRIPTION

HARDCRETE implies hardening of concrete. The dual property of "HARDENING & WATERPROOFING" greatly enhance crushing strength as observed in 1 year old concrete which makes the product most suitable. HARDCRETE can use in mass concrete, cement renderings, floor toppings. Pits & basements can be proofed against a head of water with HARDCRETE. Wearing courses to floor are hardened densified and made dustless and resistant to many form of chemical attack encountered in tanneries, garages and other industrial premises.

HARDCRETE increases plasticity of concrete to provide workable mixes less than the normal amount of water. No deleterious effects are produced. On the contrary, greatly increased crushing strength is observed. Any desired acceleration of the setting time of cement can be obtained with HARDCRETE.

APPLICATION

- 1) Mass concrete- Mix 4 liters of HARDCRETE diluted with 4 liters of water for 100 kg of cement to get the required coverage.
- 2) Cement Renderings in Portland cement renderings HARDCRETE is used in the proportion of 4 liters to 100 kg of cement. If the sand is dry, dilute HARDCRETE with 5 liters of water. For thoroughly damp sand dilute HARDCRETE with 4 liters of water.
- 3) Interior Renderings- 1:2 mix of cement and clean gritty sand to a total thickness of not less than 19 mm (3/4") for 3 coat work is strongly advised, for proofing pits or basements. The purpose of 3-coat work is to minimize the risk of shrinkage crazing.

IMPORTANT PRECAUTION

No joint should be made in an angle. Those on the walls should be formed with a wide chamfered edge, at least 0.31 meter (1 feet) from a corner round which the rendering is continuously as a cover. Joints between wall and floor should be formed by either bringing the floor screed up the wall as a cover & skirting or by carrying the render coats outwards over the floor. Floors should be laid 26 mm (1") in a single thickness.

Exterior renderings- Here too the 1st coat should consist of mixed 1:2 and this is best thrown on the wall as a "Spatter dash" coating rather than trowelled. If laid on with a trowel, the mortar should be given the absolute minimum of working. Subsequent coats should be mixed 1:3 and a wood float used for finishing. The general principles involved are the same as those related to interior renderings i.e. 3 coats in preference to 2 coats, using sharp clean sand.

SPECIAL PRECAUTIONS

HARDCRETE is not suitable for use in aluminous cement, blast furnace cement or sulphate- resisting Portland cement. Not recommended in constructions where iron bars/rods are used.

PRODUCT FEATURES

HARDCRETE Waterproofs & Hardens.

Greatly Increases Crushing Strength.

Accelerated Setting Time Of Cement.

Increases The Plasticity Of Concrete.

Free From Heavy Metals Like Lead, Chromium.

MIXING RATIO

When used in standard proportion of 4 l with 100 kg. (2 bags) cement, HARDCRETE is required in approximately the following quantities:



1) Mass Concrete (HARDCRETE required in liter)			
MIX	1 Cubic Meter of Finished concrete	1 Cubic Yards of Finished concrete	
1:2:4	12	9	
1:1 1/2:3	16	11	
2) Renderings: 4L HARDCRETE diluted with 4 parts of water suffices for:			
Renderings Mix Aggregate Size 1/2"	Approx Sq. Meters	Yards Super	
1:2	7.25	9	
1:3:4	10.00	12	
3) Toppings: HARDCRETE diluted with 4 parts of water suffices for:			
Floor Topping Mixed	Approx Sq. Meters	Yards Super	Thickness (in mm)
2:5	6.70	8	26(1")
2:5	4.20	5	39(1 1/2")
1:1 1/2:3	3.35	4	78(3")

AVAILABLE PACK SIZES

HARDCRETE is available in 30 l & 5 l jerry cans, which are made of hard durable HDPE material which is non reactive with HARDCRETE but enhances the storage stability and also preserve it, making it reusable at intervals when needed. All our packing has Snowcem Paints Hologram, a mark of genuineness.





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PRECAUTIONS

- Undercoats must be thoroughly scratched to provide a good key for subsequent work. A proper key must be provided for the 1st coat by the usual means, viz., close hacking of concrete raking out of the joints of the brick work etc., plus thorough washing & slurring. Slurry is made with a 1 part of HARDCRETE to 2 parts of water mixed with cement to creamy consistency.
- Floor toppings- It consists of cement either with Granite: aggregate should consist of 10 mm (3/8") material graded down to fines. Sand: really coarse and gritty washed sand with both aggregates, a mix of 2:5 is advised. 4 Liter of HARDCRETE must be used with 100-kg. of cement. This is roughly equivalent to gauging with a mixture of 1 part of HARDCRETE to 4 parts of water.
- **Floor topping should not be laid too wet or trowelled Under no circumstances, The following general direction should be followed**
 - I) Render the toppings smooth with a wood float and when the set commences, bring to smooth finish with a steel trowel. It is a bad practice to break the set of cement by wetting & toweling after too long an interval.
 - II) At proper consistency no water should rise to the face, if this occurs, it must not be sprinkled with neat cement.
 - III) Mature the topping wet, by keeping covered with wet sacks of sawdust, or by watering at intervals of 5 to 6 days.
 - IV) Where concrete is more than 3 days old, it is essential that the surface be close hacked or otherwise roughened. Thoroughly washed free of dust.
 - V) Undiluted HARDCRETE mixed with neat cement produces a hard set in 2 or 3 minutes where fast setting is required. Mortar mixed with HARDCRETE diluted with equal amount of water sets in about 10 minutes and must be used within that time.
 - VI) Floor repairs- 1 part of HARDCRETE with 2 parts of water normally provides sufficient acceleration, as is also the case when 4 liters of HARDCRETE is used per 100 kg of cement of concrete mixed stiff. The given figures can only be rough approximation, as the hardening time of cement is dependent upon the prevailing temperatures, the make and freshness of the cement, the amount of water used, the proportion of cement and the suction in the background. Thus HARDCRETE in quantity sufficient to half the setting time of concrete during the summer may only suffice to maintain ordinary setting time during cold weather. 1 or 2 trials are required under the actual conditions involved.

HANDLING & STORAGE

Keep containers airtight during handling and storage to avoid loss of material. Store HARDCRETE in a cool dry place and also protect it from extreme climatic conditions during storage, in transit and at site.

SAFETY MEASURES

Kindly refer to the MSDS for Snowcem HARDCRETE which gives detailed information on safety measures while handling the product, which is available on request.

Store the container with the lid tightly closed in an upright position, in a cool, dry place.

Keep out of reach of children and away from eatables.

May be harmful if swallowed. In case of ingestion, seek immediate medical attention. In case of skin contact immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.

Wear eye protection during application. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Do not breathe vapour or spray. It is recommended to wear suitable nose pad during sanding and surface preparation to avoid dust inhalation.

Corporate office:

In the event of spills, contain spillage using sand or earth.
3rd Floor, Agrima Business Centre, N. K. Mehta International House, 178, Backbay Reclamation, Babubhai Chinai Marg, Mumbai - 400 020. Maharashtra, India.

Depots:

Ahmedabad | Bangalore | Chennai | Cuttack | Ghaziabad | Hyderabad | Indore | Jaipur | Kanpur | Kolhapur | Kochi | Kolkata | Mumbai | Mumbai-Thane | Nagpur | New Delhi | Pune | Rajkot | Salem | Siliguri | Vishakhapatnam

Eco-friendly Commitment: All products of Snowcem Paints are Lead, Chromium and Mercury free

Please consider the environment before printing it.

Toll free number : 1800-891-3541 Website: www.snowcempaints.com

GREEN BUILDING PARAMETERS

HARDCRETE qualifies for "GREEN BUILDING CRITERIA"

REFERENCE

Type of Paint	LEEDS*	TERI GRIHA#
Exterior Flat	100 g/l VOC	100 g/l VOC
Interior Flat	50 g/l VOC	50 g/l VOC

As per IS 15489 : 2004, Section 6.12.2.1 specifies the "product not to contain more than 5%, by mass, Volatile Organic Compounds"

* LEED - Leadership in Environment and Energy Design, USA.
TERI - The Energy and Resource Institute, India.
GRIHA - Green Rating Integrated Habitat Assessment.

VOLATILE ORGANIC COMPOUNDS

Hardcrete contains less than 40 g/l VOC.

Hardcrete contains 1-3% VOC.



HEAVY METALS

Hardcrete is free from lead, chromium (VI), cadmium, mercury and its compounds.



HAZARDOUS CHEMICALS

Hardcrete does not contain harmful compounds like formaldehyde, phenolic compounds, benzene, etc.

