## THE RIGHT ADDITIVE FOR INTEGRAL CURING PLASTER

# **RAZON MPSC-707**



RAZON



#### **MPSC - 707**

(High Performance Integral Curing Additive for plaster, masonry & other cementatious mortars in Manufactured sand, Crushed Stone Sand or blend of natural sand and m-sand sand completely eliminating need of water curing)

MPSC-707 is a high performance, integral curing based Plaster, Masonry & Cement Mortar additive designed to provide integral curing properties. It is a polymer combining powerful plasticizer, powerful waterproofing ingredient, powerful binder, anchoring agent and a very powerful hygroscopic component, used effectively in arid climatic conditions where water availability is highly constrained or where it is not possible to cure with water, completely eliminating need of water curing.

## **Areas of Application**

Crushed stone sand, M-sand is commonly used for concreting but never used for plastering & brick masonry. MPSC-707 is compatible with Crush stone sand, m-sand or a blend of M-sand and river sand based plaster, masonry & other cementatious mortars.

Its use is ideal for application in

- Internal, External & Ceiling plasters of High Rise Structures & Buildings
- Masonry Mortars
- Cement punning on plaster
- Plastering water tanks, water retaining walls

Crushed stone sand, M-sand exhibits very high rebound; it is very difficult to work with particularly for plastering. However, it is very easily available and economical. Adding MPSC-707; 800 ml-1200 ml per bag of cement, crushed stone sand or M-sand can be easily used for plastering, it exhibits excellent finish.

Due to angularity of crushed stone sand, M-sand grains higher interlocking strength and no crack plaster is feasible when MPSC-707 is added to plaster mortar.

Hygroscopic constitute in MPSC-707 ensures that sufficient moisture is available for seamless cement hydration, hence permitting complete and sound hydration of cement mortar, leading to firm, tough, waterproof plaster. Hence no shrinkage cracks are seen after initial 24 hours, which generally appear due to very rapid moisture loss.

## **Advantages**

Addition of 1000 ml MPSC-707 per 50 kg of cement in M-sand or crushed stone sand plaster mortar ensures following advantages:-

- 1. Improved anchoring properties.
- 2. Throw back material reduces, hence

improved economy, greater mason output.

- 3. Early setting, after open time, hence sufficient strength developed to counter stress leading to crack formation in the initial critical period of 24 hours.
- 4. The plaster is waterproof, no need to use integral waterproofing compound separately.
- 5. Mortar may be mixed manually or mechanically.
- 6. Not necessary to use dry cement in plastering, hence reduce plastering cost.
- 7. The plaster mortar exhibits good workability, hence higher mason output is observed.
- 8. Useful for ceiling plaster. Mix Master Plaster SC-707 in cement slurry which is applied on ceiling to be plastered. Reduces throw back & reduces dry cement consumption, increase mason output, ensures high bind strength & good quality workmanship.
- 9. Hygroscopic constituent in Master Plaster SC-707 retains sufficient moisture in Plaster mortar ensuring complete & seamless hydration, hence ensures highest strength and highest toughness in plaster.
- 10. Due to special polymeric nature of MPSC-707 the plaster is self curing. No traditional water curing is necessary, which is a very big advantage in arid and water scarce regions, or where water curing is not feasible.

MPSC-707 may be used in masonry mortar which improves the cohesion of the mortar, and eliminates the need to re-fluidize the mortar with water and need to cure with water.

### **Dosage**

Recommended Dosage addition of MPSC-707 is 1000 ml per 50 kg of cement.

#### **Standards**

MPSC-707 confirms to IS 1905 (reaffirmed 2002) Clause 5.4.2 & IS 1661 (reaffirmed 2001) Clause 13 for application of plaster.

#### Method of Use

Cover all RCC-Masonry joints with appropriate mesh and mortar sufficient period prior to plaster. For best results, Apply Spatterdash Coat on RCC, Cement Blocks, AAC blocks, etc., surfaces one day prior to plaster. If plastering on un-hacked surface use Razon Anchorex 290 Bonding agent for excellent bonding of mortar on smooth surfaces.

Thoroughly dry mix cement and sand as usual. Add MPSC-707 to the gauging water and add this to the cement-sand mortar. MPSC-707 should never be added directly to dry mortar. Mix thoroughly. Use this mortar as usual. Use MPSC-707 for internal, external, ceiling plaster. When using crushed stone sand plaster, avoid using wooden trowel. Working with smooth surface metallic (aluminum section) trowels yield best results.

#### **Performance**

The following results were obtained in a 1:4 Cement & M-sand mortar using 1000 ml Razon MPSC-707 with a free water content of 40% with respect to mix

S/n	Particulars	<b>Test Method</b>	Result
1.	Initial Flow	-	110 mm
2.	7 days Compressive Strength	BS 6319 Pt 2	18.24 N/mm <sup>2</sup>
3.	28 days Compressive Strength	BS 6319 Pt 2	25.79 N/mm <sup>2</sup>
4.	28 days Pull Out Tensile Adhesion Strength	ASTM-D 4541	$0.77 \text{ N/mm}^2$

Above results were achieved without any water curing.

#### **Product Data**

S/n	PRODUCT DATA		
1.	Colour	Brownish Black Liquid	
2.	Specific Gravity	1.12 at 25 <sup>0</sup> C	
3.	рН	6 - 9	
4.	Dosage	1000 ml per 50 kg cement	
5.	Storage/life	1 year, store in cool & dry place in a closed container away from direct sunlight.	
6.	Toxicity	Nil. Neither initiates nor promotes corrosion of steel.	
7.	Application	For internal, external & ceiling plaster, masonry mortars & other cementatious mortars, for plastering buildings, water tanks, water retaining walls, etc without need of water curing. Compatible with machine applied plaster.	
8.	Advantages	MPSC-707 increases compressive strength & Tensile Adhesion strengths, imparts waterproofing properties, improves bonding, prevents cracking and imparts integral curing to mortar completely eliminating need of water curing.	
9.	Cement Compatibility	OPC, PPC, PSC.	
10.	Packing	5 Ltr, 20ltr, 50 Ltr.	

Rev-001 Dated-31/08/2020

It is strongly recommended that site trials be conducted using site conditions and available raw materials to evaluate the product. Since site materials and conditions are beyond our control and since above suggestions and recommendations are based on our site trials and laboratory product evaluation & trials, and since methods of use at site are beyond our control. Hence, no guarantee can either be implied or enforceable. All Razon datasheets are updated on a regular basis. It is the user's responsibility to obtain the latest version.



**MANUFACTURER:** 



## RAZON ENGINEERING COMPANY PRIVATE LIMITED

'Razon House',660, Taboot Street, P.O.Box No.49, Pune-411001 [India] Ph:91-20-26130791, 26132217 E-mail: razonengg@gmail.com, Website: www.razonengg.com

**AN ISO 9001-2015 COMPANY**