

## Masonry Cement

Masonry Cement has characteristics to ensure economy and quality at the site. Masonry cement generally contains Portland cement for early strength, plasticizers for water retention & plasticity and Air entraining agents for workability.

TATA Shudh Masonry is manufactured using the best quality clinker made out of high purity limestone. These ingredients are accurately proportioned and controlled throughout the manufacturing process to ensure uniform product.

TATA Shudh Masonry is formulated and manufactured to produce Masonry Mortar for use in brick, block & stone masonry, in all type of plastering work, in commercial, industrial and residential works.

Mortar acts as binder, but it is much more than that. It is a spacer, a leveling method, a means of maintaining plumb and most importantly, a method of sealing the joints and preventing water penetration.

Mortar made of TATA Shudh Masonry offers excellent strength and water resistance, along with other advantages such as,

- ◆ Ease of use (buttery consistency), spreading easily off the trowel
- ◆ Adhering to vertical surfaces and even the under sides of horizontal surfaces
- ◆ High on fineness giving excellent aesthetics to the structures
- ◆ Remains plastic longer so that masonry units can be properly placed

- ◆ Superior resistance to Sulphate attack
- ◆ Excellent resistance to freeze and thaw deterioration, ultimately achieving durable construction
- ◆ Good water retentivity with presence of air entraining agents
- ◆ High on crack resistance with low heat of hydration
- ◆ More resistance to water permeability
- ◆ Improved efficiency of masons as this is easy to use and isn't so heavy

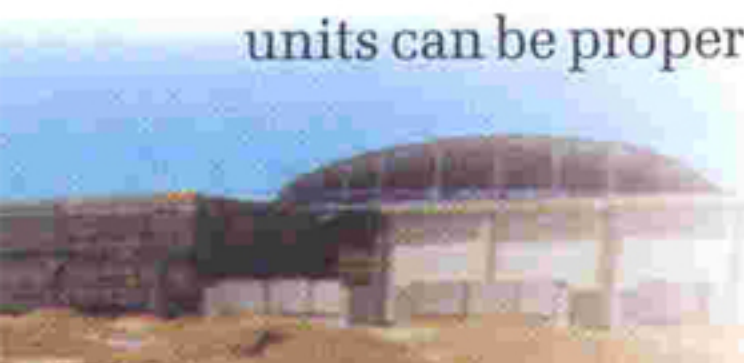
It is important to know that the ability to resist the extremes of repeated freeze-thaw cycles without deterioration is critical for the long-term performance of mortar. Masonry cement mortars have greater resistance to freeze-thaw action than Ordinary Portland Cement (OPC) Mortar.

The best mortar is made with accurately measured ingredients. The following are recommended mortar mix for use with TATA Shudh Masonry,

### Plastering Works:

Work	Cement : Sand
Internal Plaster	1:4
External Plaster	1.4
1st coat	1.4
2nd coat	1.2
Ceiling plaster	1.3
4" thick masonry	1.4
9" thick masonry	1.6
Stone Masonry	1:6

The mix proportions are intended as a guide but may need altering slightly to suit the local conditions such as type of brick or block or the sand being used.



## Comparison with BIS

CHARACTERISTICS	TEST RESULTS	REQUIREMENTS OF IS : 3466 - 1988
<b>PHYSICAL TEST</b>	<b>Range</b>	
1. <b>Fineness</b> % (Residue on 45 micron IS sieve)	10 - 12	Maximum : 15 (By wet sieving)
2. <b>Setting Time</b>		
a) Initial (minutes)	100 - 115	Minimum : 90
b) Final (minutes)	180 - 200	Maximum : 1440
3. <b>Soundness</b>		
a) Le-chatelier expansion Unaerated cement (mm)	0.0 - 1.0	Maximum : 10
b) Autoclave expansion Unaerated cement (%)	0.01 - 0.03	Maximum : 1%
4. <b>Compressive Strength(Mpa)</b> (50 mm mortar cubes)		
7 days	10 - 13	Minimum : 2.5 Mpa
28 days	17 - 20	Minimum : 5.0 Mpa
5. <b>Air Content</b> (%)	8 - 11	Minimum : 6%
6. <b>Water Retention</b> (%)	68 - 72	Minimum 60 % of original flow
7. <b>Temperature</b> (°C)	-	27 ± 2

The above cement complies with the requirement of IS : 3466 - 1988 for Masonry Cement.

Always Remember,

**Do not use Masonry Cement for concreting jobs, including pre-stressed concreting.**

Fresh mortar should be prepared at the rate it is used, so that it does not stiffen. At the

times addition of water and tempering can restore workability, yet mortar older than 1hr 30 mins should be discarded.

Technical Certificate on quality is available to customer on request.