



MIX & FIX

Cement Booster



DAMP & WATER PROTECT ADMIXTURE

Mix & Fix (Damp & Water Protect) Cement Booster is a dark brown liquid admixture formulated on modified polycarboxylic which mixes instantly with water and therefore disperses evenly with cement.

DESCRIPTION

Mix & Fix (Damp & Water Protect) cement booster waterproofs by improving the quality of the concrete or mortar. It reduces the water demand for required workability and also achieve high resistance to water ingress. Thus, it is more efficient compared to traditional powder water proofers as its use results in two-fold improvement of concrete or mortar. It is compatible with all types of cement and binders (like fly ash, ground granulated slag, silica fume, metakaolin, etc.) except high alumina cement.

USES

Mix & Fix (Damp & Water Protect) Cement Booster is used as a dual action admixture combining both the waterproofing cum plasticizing effect for cement concrete, mortars and plasters. Recommended to be used in all types of residential, commercial and infrastructural construction, critical applications like roof slabs and screeds, basements, external plastering, bathroom floors, water tanks, sumps, drains etc. Additionally, it is used in concrete applications constantly or intermittently in contact with water such as sea walls, tunnels, basements, structural and pre-cast concrete in exposed superstructures.

STANDARD

Mix & Fix (Damp & Water Protect) Cement Booster complies with IS: 9103-1999 and IS: 6925-1973 when tested at a dosage of 100ml – 200 ml per 50 kg bag of cement.

FEATURES

- **Liquid admixture:** Instant and complete dispersion throughout the mix. Uniform waterproofing throughout concrete matrix.
- **Waterproofing:** Provides resistance to water penetration either under hydrostatic pressure or capillary absorption.
- **Chloride Free:** Safe for using in prestressed and reinforced concrete.
- **MIX & FIX (Damp & Water Protect)** has been specially formulated to increase the quality of concrete with highly reduced permeability. At the same time, it gives high water reductions with improved workability & strength.
- **Compressive Strength:** Early strength increased up to 40-50% if water reduction is taken advantage of.

APPLICATION PROCEDURE

Minimum Dosage	200ml per 50kg cement
Maximum Dosage	500ml per 50kg cement

If maximum dosage is used, a minimum of 15% water should be reduced to ensure no loss in strength. Site trials shall be carried out to arrive at the optimum dosage. The required quantity of Mix & Fix (Damp & Water Protect) is measured and stir into the first or second bucket of water. The mixture shall be added to the concrete or mortar and mixed thoroughly. Mixing shall be continued and further water shall be added until the required workability is obtained.

► **Note:** Mixes using Mix & Fix (Damp & Water Protect) will require much less water than normal mixes for the same workability. Water reduction may be as much as 15% or more. If the moisture content of the sand or aggregate changes i.e., it becomes wetter or dryer, then the amount of water used must be reduced or increased to give the original workability. The plasticizing effect and water reduction are higher if the admixture is added to damp concrete after 50-70% of the mixing water has been added. However, the addition of Mix & Fix to dry aggregate or cement is not recommended.



BENEFITS

- **Damp & Water protection:** Dramatic reduction in permeability of concrete/ mortar. Highly improves the waterproofing properties of concrete.
- **Improved workability:** Improves compaction of concrete and mortar, even where harsh sands or aggregates are used.
- **Boosting Concrete Quality:** Minimized porosity, void and honeycombing. Produces dense homogenous concrete. Reduces segregation.
- **Enhance Durability:** Denser, close textured concrete with reduced porosity. Hence, enhances durability.
- **Increase Strength:** Provides high early strength. Up to 25% improvement in the strength of the concrete is gained, depending upon W/C ratio and other parameters.



DOSAGE

Type of Works	Ratio per bag cement
ETP Concrete/plaster Mortar	200ml – 350ml
Water Treatment plant	200ml – 350ml
Basement mat concrete	200ml – 350ml
Retaining Wall Concrete/mortar	250ml – 350ml
Water Tank Concrete	250ml – 500ml
Top slab Concrete	250 ml – 300 ml
Swimming Pool Concrete	250ml – 500ml

Reminders before Waterproofing Concrete

- Ensure w/c ratio is in the range of 0.40 to 0.60.
- Keep water content as low as possible.
- Place concrete quickly and compact it well.

PRECAUTIONS

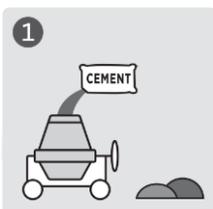
Health and Safety instructions

- ✓ Mix & Fix (Damp & Water Protection) is non-toxic & non-flammable.
- ✓ Any splashes on skin should be washed well with water.
- ✓ If contact with eyes occurs, it shall be washed well with plenty of water and medical advice sought immediately.

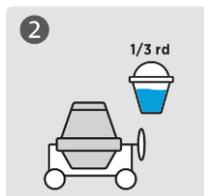
STORAGE

Mix & Fix (Damp & Water Protection) must be stored where temperatures are between 5°C - 45°C. Store under cover.

HOW TO APPLY



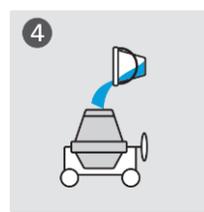
1
Mix cement, sand and aggregates in dry state.



2
Add 1/3rd part of total water required in the mixer and mix thoroughly.



3
Add Mix & Fix' with other 1/3 parts of water. Then add it to the mixer.



4
Slowly add balance 1/3rd water till the required slump is achieved.



TECHNICAL DATA

Appearance	Dark Brown Liquid
PH value	6.5-8.5
Absolute Density	1.11+0.02 at 20°C
Water Soluble Chloride	<0.1
Alkali Content	no affecting alkali
Setting Time	Test Mix ≥ control Mix +90min Test Mix ≤ control Mix +360 min
Testing Standard	ISO 758-1976, ISO 4316: 1977, BS EN 480-10:2009, BS EN 934-2:2008,
Compressive Strength (mpA)	Test Mix ≥ 110% of Control Mix

PACKAGING

Mix & Fix (Damp & Water Protection) is supplied in 1, 5, 10 and 20-liter containers.

SELF LIFE

- 24 months from the date of manufacturing until sealed pack.
- Store in a cool and dry place. Avoid direct contact with sunrays.



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Disclaimer

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