



The Chemical Company

MASTERSEAL[®] 440

Flexible bitumen emulsion

DESCRIPTION

MASTERSEAL 440 is a single component bitumen-emulsion sealing membrane of paste consistency. On evaporation of water from the applied film, it forms a durable, jointless, elastoplastic membrane with excellent adhesion to most construction materials.

Surface Spread of Flame test :- BS 476:Pt.7:71 (Class 1)

RECOMMENDED FOR

MASTERSEAL 440 is ideal for all situations where water seepage or water ingress has to be stopped. Applications include;

- external tanking of masonry or concrete walls of basements and sumps.
- waterproofing of wet rooms and retaining walls.

FEATURES AND BENEFITS

- **Seamless** -No joints or laps to allow ingress of water.
- **Adheres to green concrete** -No need to wait for 28 days. Saves valuable time.
- **Solvent - free** -Safe during application.
- **Single component** -No mixing needed. Saves time and labour.
- **High temp. resistance** -Not damaged from exposure to temp. up to 100°C.
- **Excellent adhesion** -Improved durability. Eliminates debonding of the membrane that normally causes water ingress to restart.

PERFORMANCE DATA

Application temperature	: $\geq 5^{\circ}\text{C}$
Heat resistance, 2 hr at 100°C	: Does not run off
Drying time at 20°C and 60% R.H. full cure (approx. 2.5 mm film)	: approx. 1 hr
on absorbent surface	: approx. 1½ hr.
on non absorbent surface	: 3-4 days

The performance data is typical and based upon controlled laboratory conditions. Actual performance on the job site may vary from these values based on actual site conditions.

ESTIMATING DATA

The minimum recommended coverage of **MASTERSEAL 440** is 1.5 kg/m² per layer of 1.5 mm thick wet build. Two such layers yield a dry coat thickness of approximately 1.8 mm.

PROPERTIES

Supply form	: Thick liquid
Colour	: Black
Density	: 1.01 kg/L

APPLICATION

Surface Preparation

Correct substrate preparation is critical for optimum performance.

In new construction it is recommended to avoid using curing compounds on surfaces which are to be treated with **MASTERSEAL 440**. Surfaces should be structurally sound, clean, dry and free from loose particles, oil, grease, or any other contaminant.

Cement laitence, loose particles, mould release agent, curing membrane, and other contaminants must be removed by wet grit blasting, high pressure water jetting (approx. 150 bars) or such other effective methods. Remove all sharp projections from the substrate.

MASTERSEAL 440 must be applied on surfaces after all existing water leakages have been stopped. Consult BASF Construction Chemicals for suitable methods to arrest existing water leakages.

Surface defects:

Repair all static cracks using CONCRESEIVE Injection Resin LPL. Honeycombs and voids can be made good using a suitable BASF Construction Chemicals repair mortar. Horizontal surfaces must be graded and free of cavities to allow drainage of water.

Expansion Joint:

Use MASTERFLEX 700 , a polysulphide joint sealant, to seal the joints. Apply a debonding tape over the cured sealant before the application of **MASTERSEAL 440**.

Install mortar covings in all corners to facilitate a continuous membrane after application.

Priming

MASTERSEAL 440 does not require priming. Prewet absorbent surfaces with water before application.

Placing

Avoid application during inclement weather or when rain is imminent.

Stir **MASTERSEAL 440** before use.

Apply **MASTERSEAL 440** evenly onto the prepared surface in 2 coats with a stiff brush, a 3 mm notched trowel or rubber edged squeegee. The second coat should be applied only after the first has dried. The wet film thickness of each coat should not exceed 1.5 mm.



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To reinforce the coating at corners and edges, a woven fabric made of fibreglass, polyester or polypropylene can be placed on the freshly applied first coat.

CURING

MASTERSEAL 440 is self curing. Drying normally takes about a day, depending on the ambient conditions.

Check drying by slightly pressing the thumb onto the surface and twisting. If the twisted surface returns to original position without breaking or sticking to the thumb, it confirms a dried surface.

Extend the coating to skirt the peripheral vertical surfaces at least up to a level slightly higher than the final finished level of the surface. After the coating has achieved full cure, protect the horizontal coating from UV rays using cement-sand screed or aluminium paint and vertical surfaces with fibre boards before backfilling.

Note: The detailing at external and internal corners and penetrations of pipes, cables, ducts, etc., must be carefully carried out before commencing application of horizontal sections of the membrane.

CLEANING

Clean tools with soap and water before **MASTERSEAL 440** hardens. Hardened **MASTERSEAL 440** can be removed using solvents such as turpentine, naphtha or a chlorinated solvent.

PACKAGING

MASTERSEAL 440 is available in 20 kg pails and 200 kg drums.

SHELF LIFE

MASTERSEAL 440 can be stored for 12 months in tightly sealed original packing if stored in a dry, well enclosed area at moderate temperatures. Frozen **MASTERSEAL 440** cannot be used.

PRECAUTIONS

Health : **MASTERSEAL 440** is not toxic nor corrosive. In case of eye contact, flush thoroughly with water for at least 15 minutes. Seek immediate medical attention.

In case of skin contact, remove completely with dry cloth, then wash affected areas with soap and water. If irritation persists, seek medical attention. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, seek immediate medical attention.

Fire : **MASTERSEAL 440** is not flammable.

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the BASF Construction Chemicals **Material Safety Data Sheet (MSDS)** from our office or our website.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this **BASF Construction Chemicals** publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. **BASF Construction Chemicals data sheets are updated on a regular basis and it is the user's responsibility to obtain the most recent issue.**

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by **BASF** either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not **BASF Construction Chemicals**, are responsible for carrying out procedures appropriate to a specific application.

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