

# MasterTop® 1241

# Multi component epoxy screed and repair compound

#### **DESCRIPTION**

MasterTop 1241 is a multi component epoxy screed system designed to provide continuous protection for concrete floors in medium to heavy duty situations. Applied by Power Trowel or hand trowel in thicknesses of 5mm and above, MasterTop 1241 is suitable for use as a screed or repair medium.

#### **PRIMARY USES**

**MasterTop 1241** floors have excellent mechanical properties and offer superior abrasion and wear characteristics for areas subjected to heavy traffic.

**MasterTop 1241** has good general chemical resistance, but as in all corrosive situations a full analysis of operating and exposure conditions is required, followed by reference to chemical resistance data, to ensure product suitability.

MasterTop 1241 may be used for general repairs in floors subject to heavy, abrasive traffic or where chemical resistance is required, for arris repairs or reinforcement of heavily trafficked joints. MasterTop 1241 is non-tainting and is suitable for application where foodstuffs are processed and stored.

In continuously wet areas, MasterTop 1241 floors offer improved safety by providing a slip resistant finish.

MasterTop 1241 is used extensively in the following industries:

- Food production
- Meat processing
- Vegetable and fruit canning
- Dairy products, bakeries and confectioners
- Chemical production and processing
- Textile production bleaching and dying
- Metal processing and engineering

#### **ADVANTAGES**

- High mechanical strength
- Impact and abrasion resistant
- Slip resistant
- Non tainting
- Excellent chemical resistance

### **PACKAGING**

MasterTop 1241 is supplied as a multi component, 42kg pack.

MasterTop 1240 Primer is supplied in 2.8kg units.

### **TYPICAL PROPERTIES HARDENED\***

	25°C	40°C
Pot Life	40 mins	25 mins
Cure Time	14 hours	10 hours
Compressive strength (ASTM C579-93)		
1 day	45 N/mm²	55 N/mm²
7 days	65 N/mm²	70 N/mm²
14 days	88 N/mm²	95 N/mm²
Flexural strength (BS 6319 Part 3)	24 N/mm²	
Tensile strength (BS 6319 Part 7)	14 N/mm²	
Density of mixed material	2.100 Kg/ L	
Abrasión resístance (ASTM C 501-84)	0.50mg/ cycle	
Slip resistance (TRRL rubber)	88	

# APPLICATION PROCEDURE SURFACE PREPARATION:

**MasterTop 1241** must be applied to a clean, dry substrate free from dust, dirt, oil, grease and other contaminants. A clean well prepared surface will ensure adhesion between substrate and overlay.

The method of surface preparation will be dictated by the size of area to be treated, location and degree of contamination. Specialist finishes should not be applied to concrete which contains more than 5% moisture by mass. The substrate can be considered sufficiently dry only when the Relative Humidity (RH) at the surface falls to 75% or less when measured with a hygrometer to BS 8201: 1987 Appendix A.

#### **NEW CONSTRUCTION**

Floors to be coated or overlaid should be at least 28 days old unless water reducing admixtures have been incorporated. Consult Saudi Master Builders Solutions's Technical Dept. for advice. Removal of laitance/contaminants is best achieved by mechanical means such as vacuum recovery shot blasting/ scarifying.

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## **EXISTING CONCRETE**

All contamination must be removed and a sound, clean substrate exposed. Mechanical means of preparation are preferred followed by the removal of dust and other loose debris using an industrial vacuum.

In areas of deep penetrating contamination by oils, greases and fats, hot compressed air, followed by impregnation with a low viscosity sealer / primer is the recommended treatment.

Uneven concrete should be levelled to produce a roughened flat surface. For heavy wear situations a suitable repair mortar or epoxy screed from the MasterEmaco or MasterTop ranges should be used.

Expansion, control and isolation joints in concrete substrates should be carried through **MasterTop 1241** floors and filled with a suitable sealant from the Saudi Master Builders Solutions product range.

At all details where **MasterTop 1241** systems will terminate, for example, at expansion, control or movement joints, at doorways, channels or columns, the material must be given a mechanical bond to the substrate using tie chasers. Tie chasers are grooves cut in existing concrete about 20mm deep and wide. Tie chasers can be cast during initial construction using polythene coated timber battens or cut prior to surface preparation.

Prior to application **MasterTop 1241** should be stored under cover in dry conditions and protected from extremes of temperature which may cause inconsistent workability, finish and cure times of the mixed material. Ideally, at least 24 hours before mixing, **MasterTop 1241** should be maintained at approximately 20°C.

### **PRIMING:**

Prime using MasterTop 1240 Primer. Mix the two components using a slow speed drill with a suitable paddle. Mix until uniform consistency is obtained. The components are preweighed and should not be split or divided.

Apply by brush or roller and work well into the surface. Apply according to the stated coverage. Allow to stand for 20 minutes before applying the **MasterTop 1241** to check for absorption. If the surface becomes matt, showing absorption, re-prime the surface.

Apply the **MasterTop 1241** whilst the primed surface is still tacky. If the primer hardens reprime within 24 hours.

#### MIXING:

Mixing should be carried out using a forced action mixer such as a Creteangle or Mixal Mixer.

Add the base, reactor and color pack to the mixer completely emptying the contents of the containers. Mix for 1 minute until a uniform color is achieved. Slowly add the aggregate component and mix for a further 3 minutes until a uniform color and consistency is achieved. Mixing times should be varied according to temperature but typically 4 minutes in total is sufficient. It is important to maintain constant mixing times throughout the contract, to ensure consistent color and to avoid introducing excessive air into the system.

**MasterTop 1241** systems are supplied in pre-weighed packs which should not be split or divided. It is important to use complete packs.

During application in cold weather, correct conditioning is essential, application should be halted if the ambient or substrate temperature is likely to fall below 10°C. Consideration should be given to the substrate or base slab as it is likely to be considerably colder than the surrounding air temperatures. When temperatures exceed 30°C, working times will be reduced significantly.

### **SEALING:**

When the floor is subjected to chemical or oil spillage or when hygiene is important, the finished surface must be sealed. Consult Master Builders Solutions's Technical Services Department for further details.

Good curing is essential for resin-based materials to ensure specified performance. A minimum temperature of 10°C should be maintained during the curing period by the use of additional heating, if necessary.

### **COVERAGE**

**MasterTop 1240** Primer will cover 4-5m²/kg depending on substrate.

MasterTop 1241 – 42kg unit yields 20 litres.

#### **EQUIPMENT CARE**

Remove uncured **MasterTop 1241** form equipment and tools using MasterTop Solvent No. 2.



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#### **STORAGE**

Store out of direct sunlight, clear of the ground on pallets protected from rainfall. Avoid excessive compaction and protect from extremes of temperatures. In tropical climates the product must be stored in an air conditioned environment. Shelf life is more than 1 year when stored as above.

#### **SAFETY PRECAUTIONS**

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapor until product is fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use.

#### **NOTE**

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local Master Builders Solutions representative.

Master Builders Solutions reserves the right to have the true cause of any difficulty determined by accepted test methods.

# **QUALITY AND CARE**

All Master Builders Solutions Products are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health and safety standards of ISO 9001 and Master Builders Solutions ESHQ recommendations.

- \* Properties listed are based on laboratory controlled tests.
- ® = Registered trademark of the MBCC-Group in many countries

#### CONTACT

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