

MASTERTOP® 1240 PLUS

Multi component epoxy screed and repair compound

Description

MASTERTOP 1240 PLUS is a multi component epoxy screed system designed to provide durable and abrasion resistant protection for concrete floors. Applied by trowel in thicknesses of 5mm and above, MASTERTOP 1240 PLUS may also be suitable for use as a screed or repair medium.

Primary uses

MASTERTOP 1240 PLUS floors have excellent mechanical properties and offer superior abrasion and wear characteristics for areas subjected to heavy traffic.

MASTERTOP 1240 PLUS 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 1240 PLUS may be used for general repairs in floors subject to heavy, abrasive traffic or for joint arris repairs and reinforcement of heavily trafficked joints. MASTERTOP 1240 PLUS is non-tainting and is suitable for application where foodstuffs are processed and stored.

In continuously wet areas, MASTERTOP 1240 PLUS floors offer improved safety by providing a slip resistant finish, through the application of a Seal Coat from the MASTERTOP range, incorporating anti-slip aggregate.

MASTERTOP 1240 PLUS may be applied in the following industries

NB This gives examples only and does not constitute a full and comprehensive list. For further information on application possibilities contact Degussa .

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

Metal processing and engineering

Advantages

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

Packaging

MASTERTOP 1240 PLUS (pigmented) is supplied as a multi component, 28.06kg pack (including colour pack).

MASTERTOP 1240 PLUS Neutral is supplied as a multi-component 27.46kg pack.

MASTERTOP 1240 PLUS Primer is supplied in 2.8kg units.

Typical data of hardened material*

* Properties listed are only for guidance and are not a guarantee of performance.

	25°C	40°C
Pot Life	40 mins	25 mins
Cure Time	14 hours	10 hours
Compressive strength (ASTM C579-93)	39N/mm ²	45N/mm ²
1 day		2
3 days	55N/mm ²	62N/mm ²
		2
14 days	81N/mm ²	84N/mm ²
		2
Flexural strength (BS 6319 Part 3)	24N/mm ²	
Tensile strength (BS 6319 Part 7)	14N/mm ²	
Density of mixed material	2.14kg/L	
Abrasion resistance (ASTM C501-84)	0.50mg/cycl e	
Slip resistance (TRRL rubber)	88	

Application procedure

Preparation:

MASTERTOP 1240 PLUS 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.

New construction:

Floors to be coated or overlaid should be at least 28 days old unless water reducing

admixtures have been incorporated. Consult Degussa's Technical Services Department for advice.

The removal of laitance and contaminants is best achieved by mechanical means such as vacuum recovery shot blasting or scarifying.

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. Where repairs are required they can be carried out using MASTERTOP 1240 PLUS filled out with additional aggregate or, if time allows, a suitable product from the EMACO range.

Expansion, control and isolation joints in concrete substrates should be carried through MASTERTOP 1240 PLUS floors and filled with a suitable sealant from the Degussa range.

Prior to application MASTERTOP 1240 PLUS should be stored under cover in air-conditioning and protected from extremes of temperature which may cause inconsistent workability, finish and cure times of the mixed material.

Priming:

Prime using MASTERTOP 1240 PLUS 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 1240 PLUS to check for absorption. If the surface becomes matt, showing absorption, re-prime the surface. Apply the MASTERTOP 1240 PLUS 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 colour pack to the mixer completely emptying the contents of the containers. Mix for 1 minute until a uniform colour is achieved. Slowly add the aggregate component and mix for a further 3 minutes until a uniform colour 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 colour and to avoid introducing excessive air into the system.

MASTERTOP 1240 PLUS systems are supplied in preweighed 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 35°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 Degussa'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**Primer:**

Minimum 0.2kg/m².

MASTERTOP 1240 PLUS – 28.06kg unit yields 13.1 litres

MASTERTOP 1240 PLUS Neutral – 27.46kg unit yields 12.8 litres.

Equipment care

Remove uncured MASTERTOP 1240 PLUS using CLEANING SOLVENT NO. 2.

Storage

Store out of direct sunlight, clear of the ground on pallets protected from rainfall. Avoid excessive compaction and protect from extremes of temperatures

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult Degussa's Technical Services Department.

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 vapour 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 Degussa representative.

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

Quality

All products produced by Degussa certified manufacturing facilities, are produced to conform to systems designed to meet internationally recognised quality standards.

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