

MASTERSEAL® 411

High solids protective coating based on emulsified bitumen

Description

MASTERSEAL 411 is a non-fibrated, water based bitumen emulsion. It is dark brown in colour and dries to a black flexible protective coating. The finished film is tough and waterproof and forms a barrier to water and vapour transmission.

Typical applications

- General waterproofing and damp proofing of concrete, asbestos cement, roofing felt, slate tiles, wood, etc.
- Metal protection: provides protection for structural steelwork, pipes, etc.
- Insulation: provides a vapour barrier for cold storage rooms, etc.
- Protection to a variety of buried structures such as concrete foundations and retaining walls.

Advantages

- Chemical resistance.
- Versatile.
- Economical
- Easy to apply.
- Cold applied.

Packaging

MASTERSEAL 411 is available in 8 kg and 200 kg drums.

Composition

A blend of selected fillers and bitumens emulsified in water.

Application procedure

Surface preparation:

Ensure surface to be treated is sound and free of all oil, grease or conventional curing compounds. MASTERSEAL 411 can be applied directly to concrete surfaces cured utilising non-degradable curing compounds such as MASTERKURE 181.

If the surface is dusty it should be primed with a coat of MASTERSEAL 411 diluted with an equal quantity of clean water and allowed to dry, before applying further coats of MASTERSEAL 411. MASTERSEAL 411 can be applied to damp surfaces, although both coating and surface must be allowed to dry before the MASTERSEAL 411 will cure to form a waterproof film.

Typical properties*

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

Flashpoint:	Non flammable
Specific gravity:	1.01 to 1.03 @ 25°C
Application temperature:	5°C to 50°C
Service temperature:	-10°C to 85°C (depending on operating conditions)
Chemical resistance:	Excellent to water, dilute acids, alkalis, chloride and sulphate ions
Flexibility:	Provides a firm flexible coating

Standards

ACI 515 IR-79. Guide to use of waterproofing, damp proofing, protecting and decorative barrier systems for concrete. Chapter 2 Section 2.1.1, 2.1.2., 2.1.3.

Performance

Concrete coated with MASTERSEAL 411 will prevent the absorption of saline solutions. On uncoated surfaces, salts in groundwater will penetrate and can cause reinforcement corrosion and concrete deterioration

Application

Agitate before use. As settlement can occur, the drum should be rolled before decanting material.

Apply by brush, broom or squeegee. Apply one or two coats, depending on the degree of protection required. Apply subsequent coats at right angles to the first, allowing 12 to 24 hours between coats. Where being utilised to damp proof solid floors or where a screed is to be applied over MASTERSEAL 411, apply a second coat at right angles and lightly grit to form a key. Allow at least 24 hours before

application of concrete screed, ensuring this is greater than 50mm in thickness.

Coverage

2-4m² per litre per coat depending on substrate porosity.

Equipment care

After use, if the MASTERSEAL 411 has not dried, it may be possible to clean tools using soapy water. If the MASTERSEAL 411 has dried remove as much as possible by physically scraping and then remove remainder with paraffin, white spirit or CLEANING SOLVENT NO. 2.

Storage

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment. As with all bituminous emulsions, some settlement will occur with prolonged storage. It is, therefore, necessary to invert the drums monthly to disperse the settlement.

Shelf life is up to 6 months in unopened containers, when stored as above.

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. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation. For further information refer to the material safety data sheet.

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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