

▶ Description



TamSeal DS is a unique chemical treatment for the waterproofing and protection of concrete. TamSeal DS is a special formulation designed specifically for a dry-shake application on horizontal concrete surfaces where greater resistance to impact and abrasion is required.

Packaged in the form of a dry powder compound, TamSeal DS consists of Portland cement, various active proprietary chemicals and a synthetic aggregate hardener which has been crushed and graded to particle sizes suitable for concrete floors. TamSeal DS becomes an integral part of the concrete surface thereby eliminating problems normally associated with coatings (e.g. scaling, dusting, flaking and delamination). The active chemicals react with the moisture of the fresh concrete causing a catalytic reaction, which generates a non-soluble crystalline formation within the pores and capillary tracts of the concrete.

The standard colour is grey. White, buff and other colours are available upon request.

▶ Key Benefits

- Resists extreme hydrostatic pressure from either the positive or negative surface of the concrete slab
- Becomes an integral part of the substrate
- Highly resistant to aggressive chemicals
- Can seal static cracks up to 0.4 mm
- Allows concrete to breathe
- Non-toxic
- Less costly to apply than most other methods
- Permanent
- Increases flexibility in the construction schedule

▶ Typical Applications

- Sewage and water treatment plants
- Traffic bearing surfaces
- Warehouse floors
- Foundation slabs
- Below-grade parking structures

▶ Application Guidelines

Application Method

Fresh concrete is placed, consolidated and levelled. Wait until concrete can be walked on leaving an indentation of 6 – 10mm. Concrete should be free of bleed water and be able to support the weight of a power trowel then float open the surface.

Immediately after float opening the surface, apply $\frac{1}{2}$ of the dry shake material by hand or mechanical spreader. The dry shake material must be spread evenly. As soon as the dry shake material has absorbed moisture from the base slab, apply the remaining $\frac{1}{2}$ of the dry shake material by hand or mechanical spreader. The dry shake material must be spread evenly, then it should power float into the surface.

When the concrete has hardened sufficiently, power trowel the surface to the required finish.

Note: Environmental conditions (e.g. hot or cold temperatures) may affect the application and installation of the Dry Shake powder. Consult with TAM's Technical Department regarding the optimum concrete performance under a variety of conditions during application of TamSeal DS.

Curing

Curing is important and should begin as soon as the final set has occurred but before surface starts to dry. Conventional moist curing procedures such as water spray, wet burlap or plastic covers may be used. Curing should continue for at least 48 hours. In hot, dry, sunny conditions, consult manufacturer for specific instructions. Instead of moist curing, concrete sealers and curing compounds meeting ASTM C-309 may be used.

It is common that the edges of a slab wall will set earlier than the main body of concrete. Such edge areas can be dry-shaked and finished with hand tools prior to proceeding with the application to the main body of concrete.

For best results when applying dry shake materials, the air content of the concrete should not exceed 3% (high air content can make it difficult to obtain a proper application).

If a higher entrained air content is specified (e.g. for concrete that will be exposed to freezing and thawing), contact local TAM International representative for further application information.

In hot, dry or windy conditions, it is advisable to use an evaporation retardant on the fresh concrete surface to prevent premature drying of the slab.

Coverage

Under normal conditions, the coverage rate for TamSeal DS is 3.0 - 3.5kg/m² depending on the degree of abrasion resistance required.

Note: Under heavy traffic conditions or where even greater abrasion resistance is required, consult with your local TAM International representative for a recommendation that meets your specific need.

▶ Storage

TamSeal DS should be stored at room temperature (min 10°C and max 38°C), kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, then a shelf life of 6 months can be expected.

▶ Health & Safety

TamSeal DS should only be used as directed. We always recommend that the Health & Safety data sheet is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Health & Safety data sheet is available upon request from your local TAM International representative.