

PRODUCT DATA SHEET

Sikacrete[®]-Gunite DP-4

DRY SPRAY GUNITE MORTAR FOR CONCRETE REPAIR

DESCRIPTION

A one part, unaccelerated Portland cement based gunite mortar, with silica fume.

USES

A high performance repair mortar for dry spray application to concrete, stone and mortar substrates. Suitable for:

- New construction
- Repairs and maintenance work
- Levelling of large areas

CHARACTERISTICS / ADVANTAGES

- Ready for use, one component
- Excellent workability
- Rapid strength development
- Very high density
- Good adhesion to substrates
- Formulated to minimise dust development
- Can be applied in thicknesses of 25 to 200mm
- W/C ratio can be maintained within 0.36 – 0.40

PRODUCT INFORMATION

Chemical Base	Cement and crystalline free silica aggregate
Packaging	25kg bags
Appearance / Colour	Powder Grey
Shelf Life	12 Months
Storage Conditions	Store in a dry area between +5°C and +30°C. Protect from direct sunlight.
Density	<ul style="list-style-type: none">▪ Dry Bulk density 1.6 kg/litre▪ Mixed density 2,4 kg/litre
Maximum Grain Size	Dmax: 4mm

Compressive Strength

<u>1 day</u>	<u>3 day</u>	<u>7 day</u>	<u>14 day</u>	<u>28 day</u>
30N/mm ²	39N/mm ²	47N/mm ²	55N/mm ²	62N/mm ²

APPLICATION INFORMATION

Yield	Depending on the substrate texture, whether sprayed vertically or overhead and the thickness of the coating. Generally allow 240 – 250 kg/m ² per 100mm. Volume Yield: ~11,0 litres per 25kg bag.
Ambient Air Temperature	Min. 5°C – max. 35°C.
Substrate Temperature	Min. 5°C – max. 35°C.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

The concrete substrate must be sound and of sufficient compressive strength (min. 20 N/mm² (MPa) with a minimum pull off strength of 1.5 N/mm² (MPa)).

The surface must be dry and free of all contaminants such as oils, grease, coatings and surface treatments etc.

The concrete substrate must be prepared mechanically to remove cement laitance and achieve a profile open textured surface.

Weak concrete should be removed and surface defects such as honeycombed areas; blowholes and voids must be fully exposed.

Embedded reinforcing steel should be free from scale, rust, oil and grease and treated with a suitable protective coating such as SikaTop Armatec® 110 EpoCem®.

The substrate should be pre-wetted prior to application. When applying over critical substrates or reinforced concrete damaged by corrosion of the underlying steel, the use of SikaTop Armatec® 110 EpoCem® as a bonding agent is recommended.

MIXING

Sikacrete® Gunite DP-4 may be applied using a dry-spray gunite machine. Place the dry Sikacrete® Gunite DP-4 straight into the hopper of the gunite machine. The desired water content is added and adjusted at the nozzle.

APPLICATION

Sikacrete® Gunite DP-4 may be applied using various types of small dry-spray gunite equipment.

Sikacrete® Gunite DP-4 is applied in layers to the prepared substrate (**not in one pass**) to build up to the maximum thickness required. As soon as the final coat has been applied strike-off the gunite mortar with a straight edge to required finish level.

Sikacrete® Gunite DP-4 cures with minimal shrinkage under moderate weather conditions. Where the work is exposed to intense sunlight, heat or strong air currents, the freshly prepared gunite mortar should be kept damp and prevented from drying out too rapidly. For optimum performance the material should be ap-

plied by an experienced nozzle man and good curing practices should be observed.

Do not re-use the rebound material - Discard it

For finishing purposes Sikacrete® Gunite DP-4 can be over coated with any of the Sika range of one component repair mortars. A final coat of Sikagard®-550W Elastic is recommended for optimum protection of the substrates.

CURING TREATMENT

Curing is important where ambient conditions may lead to rapid surface drying, the use of light water fogging for 48 hours or Sika® Antisol curing compounds are recommended. (Do not commence fogging until initial set has been reached)

CLEANING OF TOOLS

Remove uncured Sikacrete® Gunite DP-4 from tools and equipment with water. Cured material can only be removed mechanically.

LIMITATIONS

Freshly applied Sikacrete® Gunite DP-4 should be protected from damp, condensation and water for at least 12 hours.

Do not re-use the rebound material, it must be discarded

Wear protective clothing, gloves, goggles, boots etc.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

ECOLOGY HEALTH AND SAFETY

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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