Construction

Sika® Chapdur®-Premix BA

Non-Metallic Floor Hardener

Product Description	**Sika® Chapdur®-Premix BA** is a ready-to-use mixture of cement, pigments, additives and hard aggregate of mineral origin. The particles have been specially selected for their shape, grading, high physical quality and mechanical performance. Suitable for use in hot and tropical climates.
Uses	**Sika® Chapdur®-Premix BA** is added to concrete surfaces to improve their resistance to abrasion and inhibit dust formation. **Sika® Chapdur®-Premix BA** is suitable for all floors exposed to severe mechanical wear, such as: ■ Warehouses, factories. ■ Quays ■ Workshops. ■ Car parks, service stations, garages etc.
Advantages	■ High resistance to abrasion. ■ Reduces surface dust. ■ Improves resistance to impact. ■ Improves resistance to Oils and greases. ■ Intrinsic colouring. ■ Easy application; **Sika® Chapdur®-Premix BA** is Broadcasted into the freshly placed concrete. ■ Saves time and labour costs by eliminating the need for a monolithic screed. ■ Even finish obtainable when properly smoothed.
Test certificate	Taber wheel wearing test-CEBT report no. 2352.6.607.

Product Data

Type	Non-metalic aggregates
Form	Cement-grey, natural and red (other colours on request).
Packaging	25 kg bags, bulk packs are also available.
Storage Condations	Store in original sealed packaging in a cool and dry environment at temperatures between +5°C and +35°C away from direct sunlight
Shelf life	12 months minimum from date of production if stored properly in original unopened packing.

Technical Data

Apparent Density	~ 1.5 kg/lt.
Mohs Hardness	7 - 8 (steel score)
Resistance to wear	Loss of weight in taber test after 1'000 cycle. Reference sample = 4.6 g. (quarts sand mortar containing cement 450 kg/m^3) **Sika® Chapdur®-Premix BA** = 2.4 g.
Curing	The **Sika® Chapdur®-Premix BA** surface must be protected to prevent rapid moisture loss which could result in surface cracking. Immediately after final levelling cure and seal using Sikafloor® Proseal. Curing times: Foot traffic: 1-2 days Light vehicle traffic: 7-10 days Fully cured after: 28 days Curing time depends on temperature and type of cement employed

Application Details

Substrate preparation	The concrete slab should be at least 15cm thick, contain an adequate proportion of cement (>350kg/m^3), be of a minimum 25 N/mm^2 compressive strength and have an on-site slump of 75-100mm. It is recommend to add a suitable Sika concrete admixture to improve the concrete properties (e.g. Sikament® or Viscocrete®). Level the freshly poured concrete by means of a vibrating beam. A soon as the plasticity permits smoothen. Preferably by using a mechanical trowel.
Consumption	Approximately 4.0-6.0 kg /m^2 depending on floor requirements.
Application	The concrete slab is ready for application of the **Sika®Chapdur®-Premix BA** when a thumb pressed hard onto the surface leaves an imprint of about 3-5 mm depth. Broadcast the **Sika® Chapdur®-Premix BA** evenly onto the fresh concret by hand or with suitable automatic spreading device in two stages (1st stage 3-4 kg/m^2 , 2nd stage 1-2 kg/m^2). With manual application, the surface bleed water should be removed or allowed to evaporate before application of the **Sika® Chapdur®-Premix BA**. Care should be taken to apply the powder so as to avoid creating ripples etc. in the concrete surface. Casting **Sika® Chapdur®-Premix BA** powder carelessly or further than 2 meters from point of casting will reduce the consistency of finish.
Compaction	Wait until the **Sika® Chapdur®-Premix BA** has been evenly moistened by the water in the concrete. The first stage should be levelled and compacted into the fresh concrete using a low speed mechanical trowel, held perfectly flat, followed immediately with the broadcasting of the second stage of **Sika® Chapdur®-Premix BA**. **Sika® Chapdur®-Premix BA** results in the slab surface becoming stiff more quickly than usual. Careful trimming should take place by hand along the edges where adjoining slabs are to be poured. Final finishing to close pores and remove undulations can be achieved either by hand or power trowel. **Note: If parts of the surface come loose or if the laitance rises, this means the concrete is still too fresh.**
Smoothing	As soon as the plasticity or initial set allows, perform preliminary smoothing with the same machine running at low speed but equipped with metal smoothing blades, set at minimum angle. Any final smoothing required should be performed later with the machine running at high speed.
Joints	Contraction joints, and floor joints should be saw-cut only after 24 hours. When the slab has hardened, the joints can be filled and sealed with the appropriate Sikaflex® Polyurethane sealant in accordance with the floor requirements.
Protection	Protect the concrete surface from mechanical damage during subsequent site operations whilst the curing process continues

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Important Notes

- The application of the dry shake powder not be carried out in strong draughts or in direct sunlight.
- Do not overwork the **Sika® Chapdur®-Premix BA**.
- Do not spray water to wet out the surfaces of the **Sika® Chapdur®-Premix BA**.
- Concrete substrate characteristics such as water content and cement quality may induce slight colour variations.
- Slip resistance can be enhanced through chemical ageing. Contact Sika's Technical Services Department for advice.
- Colour variation during the drying out period is natural for this system and is to be expected.
- Dry shake hardeners give a finish to concrete with some colour variation from point to point due to the natural variability of the concrete onto which they are applied. .
- Cleaning and subsequent maintenance of the **Sika® Chapdur®-Premix BA** should be performed in accordance with our recommendations (Available on request)

Remarks

To ensure a high standard of colour consistency it is essential that the floor laying operations is as clean and protected an environment as possible.
Every effort should be made to ensure an even application of **Sika® Chapdur®-Premix BA**, correct timing and trowelling techniques are essential.

Notes

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.

Safety

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

Legal Notes

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