Ecoscreed Leveller

RAPID DRYING TOPPING FOR CEMENTITIOUS SUBSTRATES (5mm - 30mm)

Description

Ecoscreed Leveller is a eco friendly protein free cementitious grey powder consisting of high quality synthetic resins, special cements, graded glass sands and selected fillers. When mixed with water a self levelling topping is produced which sets within 1 hour at 20ºC, is rapid drying and can receive coatings after 24 hours at 20ºC. The system can be continuously mixed and pumped, or for smaller areas, mixed and placed by hand and has a working time of 20minutes at 20ºC. The topping has been specifically designed for resurfacing existing light industrial concrete floors to provide a rapid drying wearing surface where no dusting.and excellent hardness is requiired. When applying Ecoscreed Leveller to absorbent and non-absorbent sub-floors then Ecoscreed Primer AP1000 must be used in accordance to the priming instructions given. Alternatively a coarse sand blinded epoxy primed substrate may be used.

Design Use

For the levelling and smoothing of internal light industrial and commercial concrete floors from thicknesses of 50mm in one continuous pumping or hand applied operation. The screed can be walked on within 4 hours at 20ºC and forklift trafficked after 24 hours at 20ºC . Ecoscreed Leveller should be given a protective sealing coat using Ecoscreed PU Sealer or Ecoscreed WD 250 or SF500 epoxy paint coatings to provide additional protection from chemicals, water, oil or excessive surface wear. NB. As with any other industrial pumped screed, excessive service use involving the dragging or skidding of steel or hard plastic wheeled forklifts and the dragging of heavy machinery or pallets with protruding nails will cause gouging and surface damage of the material.

Substrate Perparation

Ecoscreed Leveller can be applied to dry primed surfaces that are hard, sound and free from dirt, dust, oil, grease, paint, plaster, laitance or other contaminants which could act as a barrier to adhesion. Where the floor has been contaminated by chemicals or mineral acids, the specific advice of the Ecoscreed Ltd Technical Department should be sought on 0836 582 033 or 01372 842 102. The preparation of substrates by mechanical methods such as shotblasting , scabbling or diamond grinding is considered the most effective means of providing a suitable mechanical key. On direct to earth concrete floors ensure that a suitable damp proof membrane is installed via either an intact polythene DPM under the main slab or by using Ecoscreed Epoxy DPM fully blinded with 16/30’s sand over the substrate. Once the Ecoscreed Epoxy DPM is fully dry, vacuum away any remaining loose 16/30's sand paper prior to the application of Ecoscreed Leveller NB. Power floated concrete should be shot-blasted to provide sufficient mechanical key to the primer.

Priming

Priming of the prepared surface should be carried out using a minimum of two coats of Ecoscreed Primer AP1000 applied using a soft broom and ensuring that any ponding of primer or puddles are fully brushed out and dry prior to screeding. DO NOT USE ROLLERS.

First coat: 1 part primer to 3 parts water (allow to dry ie 2 - 3 hours)

Second coat: 1 part primer to 1 part water (allow to fully dry overnight)

Particularly absorbent substrates may require a furthur coat to prevent air bubbling in the final finish. A priming trial is recommended

Application Ecoscreed

Apply the mixed Ecosreed onto the prepared, primer dried substrate. The screed will flow out and self level during the first 10 minutes of its 30 minute working time. The working time will be extended at lower temperatures and reduced at higher temperatures. The applied layer of at least 5mm should not be subjected to direct sunlight or through wind drafts whilst curing.

Pumping
Flow should be checked with a Ecoscreed Flow Ring (30mm diameter x 22.5mm depth) to ensure that the correct consistency is achieved for the continuous pumping operations. A clean and dry flow ring should be placed on a dry glass plate or perspex sheet on a level surface. Freshly mixed screed should be poured into the ring so as to completely fill it. Lift the ring vertically and allow the screed to flow for 30 seconds and then measure the mean diameter. It is recommended that during continuous pumping applications, the flow is checked at least every 40 bags (140 to 150mm) and if necessary adjusted accordingly.

Thickness
The standard mix of Ecoscreed Leveller is suitable for thicknesses of 5mm up to 30mm in one single application. Where the thicknesses required result in pumping having to take place in two layers then, so as to prevent air bubbling, the first layer must be primed as per details in priming section.

Coverage
Approximately 1.7kg of Ecoscreed Leveller powder/mm/m2. NB: Coverage will depend upon the substrate texture.

Packaging
Ecosreed Leveller is packed in net weight 25kg paper sacks incorporating a polythene liner

Storage
Ecosreed Leveller has a storage life of not less than 12 months if stored in dry conditions

Precuations
Ecosreed Leveller is non hazardous in normal use. The presence of cement in the product gives an alkaline screed which may cause irritation if prolonged contact with the skin takes place. Care should be taken to avoid inhalation or ingestion of dust and prevent contact with the eyes. Wear suitable protective gear.

Technical Data
Working Time @ 20ºC : 20 minutes approx (Temperature dependent)
Compressive Strength : >30 N/mm2 at 28 days
Tensile Strength : 8 N/mm2 at 28 days
Abrasion Resistance : AR1 (BS8204)
Maximum Aggregate Size : 1.0mm
Flow Ring 30 second test : 140 - 150mm
Yield : 1.7 kg/mm/m2

Isolation
In accordance general codes of practice it is recognized that all isolation joints, construction joints and columns joints should be isolated or maintained through the screed to allow both the screed and substrate to move freely relative to all fixed parts of any building.

Ecoscreed Ltd provides the above data in good faith, without warranty and as a guide to typical values only. will be accepted for any loss or damage arising from the use of either the product or this technical data since the company has no direct or continuous control over where or how its products are applied. We refer also to our standard Terms and Conditions of Sale which are available on request.
This data should not be taken as a specification.