



ULTRALEVEL ESL 1000/2000/3000

SELF LEVELLING SEAMLESS, EPOXY FLOOR SYSTEM



DESCRIPTION

Ultralevel ESL consists of graded aggregates bound in a pigmented epoxy resin binder. It is supplied as a four component system, pre-weighed for on-site mixing. When laid, it provides a smooth, light-reflective surface. It is available in a range of standard colours.

RECOMMENDED USES

Ultralevel ESL is used in wide range of industrial environments where a lasting solution to floor maintenance problems is required. It provides a dense, impervious, coloured and chemically resistant floor surface which is hygienic and easy to clean. Typical applications include Clean rooms, Laboratories, Hospitals, Plant rooms, Light industrial plants.

FEATURES & BENEFITS

Fast application, Chemical resistance, Durable, Hygienic Attractive - available in a wide range of colours.

APPLICATION PROCEDURE

Concrete surfaces should be free from laitance & dust by sandblasting or abrading with a hard wire brush, etching with etching agents and wire brushing. It may be necessary to remove the concrete by chipping. Oil or grease, if any should be removed by using a strong industrial detergent or organic degreaser. Then the surface should be washed thoroughly with water and dried before the application of ESL. The pre-requisites for good adhesion of the coating are cleanliness,

roughness and dryness of the surface. Unless these are ensured by proper surface preparation, a successful performance can not be guaranteed. The degree of dampness of the surface must be less than 4%. All surfaces to be treated with Ultralevel ESL should be primed with Primer E1, designed for maximum absorption and adhesion to concrete substrates. Add the entire contents of the hardener to the base and mix thoroughly for at least 2 minutes. Under no circumstances should part mixing be considered. Once mixed, the primer should be applied immediately to the prepared substrate using stiff brushes or rollers. The primer should be well 'scrubbed' into the substrate to ensure full coverage, but care should be taken to avoid over application or 'ponding'. Allow the primer to dry before proceeding to the next stage. Do not proceed whilst the primer is 'tacky' as this will lead to unsightly marks on the finished surface. Porous substrates may require a second primer coat. When the first coat is fully absorbed into the substrate, apply the second coat. Ultralevel ESL is supplied in four pre-weighed packs (base, hardener, colour paste and aggregate) which are ready for immediate on-site mixing. Part mixing of these components is not acceptable and will affect both performance and appearance of the finished floor. Mixing should be carried out using either a forced action mixer; or a heavy duty, slow-speed drill fitted with mixing paddle. The components should be mixed in a

suitably sized mixing vessel. The colour pack should be added to the base & mixed for 30 -35 sec until homogeneous. The hardener pack should be added to the base container & mixed for 30 - 45 seconds, until homogeneous. Thereafter, the contents of the graded aggregate pack should be slowly added & mixing carried out for a further 3 minutes until a completely homogenous material is obtained. The applicator should ensure that there are sufficient supplies of plant, labour and materials to make the mixing and subsequent application process a continuous one for any given, independent floor area. Once mixed, the material must be used within its specified pot life. The material should be poured onto the prepared and primed substrate as soon as mixing is complete. It should be spread to the required thickness using a serrated trowel; with care taken not to overwork the resin, spreading evenly and slowly. Immediately after laying, the material should be rolled, using a spiked nylon roller, to remove slight trowel marks, and to assist air release. The rolling should be carried out using a 'back and forth' technique along the same path. An overlap of 50% with adjacent paths is recommended. Further light rolling may be required to remove surface imperfections, or for subsequent release of trapped air, but should be prior to the setting of the product.

FLOOR JOINTS

All existing expansion or movement joints should be followed through the new floor surface. Joint sealant & joint geometry should be compatible with the floor type used, intended exposure conditions and likely movement characteristics of the substrate.

CLEANING

Immediately clean the tools, equipment and the mixing container using solvents like Bostik Thinner E otherwise, removal of dried / hardened epoxy material is difficult.

MAINTENANCE

The service life of a floor can be considerably extended by good housekeeping, regular cleaning may be carried out using a rotary scrubbing machine with a water miscible cleaning agent at temperatures up to 50°C.

Note: 1. If the atmospheric temperature falls below 10°C then both base & hardener components should be warmed to 25°C in hot water bath before mixing. 2. When working in closed areas like inside containers or silos, good ventilation must be provided. 3. After the application, Ultralevel ESL should be protected from rain and dew for a period of 6 hours. 4. On application, the relative humidity should not exceed 75%.

PACKAGING

Ultralevel ESL 1000 - 16 kg
 Ultralevel ESL 2000 - 17 kg
 Ultralevel ESL 3000 - 22 kg

PERFORMANCE PROPERTIES	
Colour	Desired colour
Pot life at 27 ± 2°C	30 minutes
Minimum hardening temperature °C	10
Curing time, in days, minimum	7
Cure time - foot traffic, hours	24
Cure time - vehicular traffic, hours	72

Chemical Resistance

Ultralevel ESL has excellent resistance at ambient temperatures to a wide range of industrial chemicals.

COVERAGE

Primer E 1 - 4 to 5 sq. m per kg.
 Ultralevel ESL 1000 - 10 sq. m per pack @ 1 mm thickness
 Ultralevel ESL 2000 - 5 sq. m per pack @ 2 mm thickness
 Ultralevel ESL 3000 - 4 sq. m per pack @ 3 mm thickness

STORAGE & SHELF LIFE

12 Months in the original packing.

HEALTH & SAFETY

Wear suitable protective clothing, gloves and goggles while handling.

BOSTIK HOTLINE

Smart help +91 80 27833520



Bostik India Private Limited

124 / 1 & 124 / 2A, Kachanayakanahalli, Off. Hosur Road, Bommasandra Post, Anekal Taluk, Bengaluru - 560 099, India. E-mail : bostikinfo.india@bostik.com
 For more information explore : www.bostik.com