a.b.e.® Construction Chemicals

abe.®screed SLC P
Self-levelling compound pumpable

FAST TRACK SELF-LEVELLING SCREED

DESCRIPTION

abe.®screed SLC P is a single pack, rapid hardening cement based screed for levelling floors where quick setting is essential. **abe.®screed SLC P** can be hand applied by trowel (0 – 20 mm) or can be pumped (4 – 20 mm). For pumped applications, an 8 mm average thickness would be a typical expectation on a reasonably level base.

USES

For fast track refurbishment and new construction where finishes such as carpets, ceramic tiles, vinyl, wood block or cork need to be applied quickly.

Used for smoothing floors in office buildings, dwellings, shops, public buildings, schools, hospitals and airports where a fast track, smooth underlay is required for the above finishes.

ADVANTAGES

- Quick setting
- Self-levelling
- Can be pumped up to 2 000 m² per day, under suitable conditions
- Walk on after 6 – 8 hours @ 25 °C under normal conditions
- Can normally apply coverings onto a 10 mm thick screed after 24 hours
- Pumpable or hand laid
- Single pack just add water
- Protein free, will not harbour bacteria

SURFACE PREPARATION

The base slab or screed should be sound with a minimum thickness of 40 mm and with a minimum compressive strength of 25 MPa. The surface must also provide a minimum tensile adhesion strength of 1.5 MPa. All surfaces must be clean, mechanically sound and free of laitance, dust, grease and oil. Vacuum abrasive blast cleaning is the preferred method of surface preparation. Wet grinding followed by vacuuming may also be used.

Refer to the "Method statement **abe.®screed SLC P**" for the "Surface Preparation".

TYPICAL PHYSICAL PROPERTIES	
Compressive strength @ 28 days (N/mm²)	30 (typical)
Flexural strength @ 28 days (N/mm²)	9 (typical)
Adhesion to concrete @ 28 days (N/mm²)	> 1
Shrinkage (%)	< 0,06
Maximum particle size (mm)	0.5
Protein content	Nil
Pumped thickness (mm)	4 – 20
Hand applied thickness (mm)	0 – 20
Application temperature (°C)	5*1 – 25
Working time @ 20 °C (minutes)	20
Walk on time @ 25 °C (hours)	6 – 8
Overcoating time @ 20 ° C, 50 % RH and 10 mm thick (hours)	24
Flow ring 30 mm dia x 50 mm high	Target 160 – 190

*1 Application at low temperatures will result in extended set times and slow strength gain.

BONDING/PRIMING

Concrete surfaces should be primed with **abe.®prime SLC acrylic primer**. Apply the **abe.®prime SLC acrylic primer** (refer to data sheet for additional information) onto the floor surface by means of a brush and leave it to dry before applying **abe.®screed SLC P**.

Priming improves the adhesion of the **abe.®screed SLC P** to concrete, prevents formation of air bubbles and reduces water absorption into the sub floor. For information on how to prepare impermeable concrete bases or floors other than concrete floors, contact **a.b.e.®'s** technical service department.

MIXING

Correct mixing and proportioning of the **abe.®screed SLC P**, is essential for good results. It is imperative to carry out the "flow ring" test on each new batch to ensure that the product performance properties are obtained and to provide ease of application.

Refer to the "Method statement **abe.®screed SLC P**" for additional information.

Add 5.0 L of clean potable water to the mixing vessel and whilst slowly stirring, slowly add the 25 kg of powder and mix for 1 minute. Once all the powder has been added mix for a further 4 to 5 minutes at a medium speed until the products consistency is obtained and is lump free and homogeneous. Avoid mixing at high speeds as this may entrap air.

The mix must be applied immediately after mixing, if the mix is left to stand the flow properties will be reduced due to the hydration process and impair the finish.

Excess water may lead to a friable surface and will reduce the strength of the **abe.®screed SLC P**.

Do not mix more **abe.®screed SLC P** than can be applied in 10 minutes.

COVERAGE (POWDER)

1.7 kg/m² per mm thickness

34 kg/m² at 20 mm thick

APPLICATION

Refer to the "Method statement **abe.®screed SLC P**" for the application process.

Pump or pour the mix over the concrete surface. For pumped application, ensure the continuity of electricity and water supplied is secured. Pump or pour the **abe.®screed SLC P** onto the floor in a continuous operation, feeding fresh material into a wet edge.

abe.®screed SLC P will level out to a smooth, even finish. Where necessary, release small air bubbles from the newly laid screed with a trowel, spiked roller or a tee-bar. This practice must be adopted within 5 minutes of application to avoid interfering with the final levelling properties.

Any lumps found in the product are to be removed before placing the product.

CLEANING OF EQUIPMENT

Tools, brushes and mixing equipment should be cleaned with water immediately after use and before material has set. Hardened material can only be removed by mechanical means.

PROTECTION ON COMPLETION

Ensure the **abe.®screed SLC P** is not subject to draughts during the first 24 hours of curing as this may lead to cracking and crazing. Tape up doorways with polythene if necessary to prevent air movement during application.

Subsequently ensure the room has sufficient ventilation to allow the screed to dry. Ensure adequate protection from other trades and traffic after installation, this includes the primer which must be free of dirt and dust before applying the screed, prevent contamination by following trades e.g. plastering, including water spillage.

HARDENING AND DRYING TIMES

abe.®screed SLC P may be walked on after 6 – 8 hours @ 25 °C, and may be sanded at joints if required 24 hours after application. The floor covering can be installed after 24 hours, depending on the type of finish, density and dryness of **abe.®screed SLC P** screed and ambient conditions.

Before installation of floor coverings, the requirements for critical moisture contents for particular floor coverings have to be observed.

TEMPERATURE AND RELATIVE HUMIDITY

Internal air and floor temperatures must exceed + 5 °C. The RH of the concrete floor must not exceed 95%, but where moisture sensitive floor coverings are to be laid soon after **abe.®screed SLC P** application, the RH of the base must be in accordance with the relevant floor overlay manufacturers specification.

MODEL SPECIFICATION

abe.®screed SLC P single component, cement based screed for levelling floors. Supplied and laid on a suitable sound laitance free and vacuum cleaned concrete or screed base primed with **abe.®prime SLC acrylic primer**.

- Minimum thickness: Feather edge by hand or 4 mm by pump
- Maximum thickness: 20 mm

To be mixed and laid in accordance with the instructions of **a.b.e.® Construction Chemicals**.

PACKAGING

abe.®screed SLC P is supplied in 25 kg polyethylene lined paper bags (Code: 50111025).

HANDLING AND STORAGE

This product has a shelf-life of six months if kept in a dry cool place in the original packaging. In more extreme conditions this period might be shortened.

HEALTH AND SAFETY

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The safety data sheet is available from your local **a.b.e.® Construction Chemicals** sales representative.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot – because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied – accept any liability either directly or indirectly arising from the use of **a.b.e.®** products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements. **a.b.e.® Construction Chemicals** has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in flooring and concrete technology.

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