

# PRODUCT INFORMATION LB-GROUT SL-2

Self-leveling mortar, fast curing, high wear resistance

# **SCOPE OF USE**

**LB GROUT SL-2** is used to smooth and level concrete, old or new ceramic tile floors with a thickness of each layer from 5-40 mm, suitable for indoor construction for public works and public floors. industries subject to high traffic density such as floors in shopping centers, supermarkets, offices, showrooms, and parking.

It has high mechanical strength and wear resistance, **LB GROUT SL-2** can be applied as a floor finish. It has versatility, the product is also suitable for many construction items in civil buildings.

### **TYPICAL APPLICATIONS**

Floor construction for shopping centers, supermarkets, restaurants, shops, showrooms.

Construction of wear-resistant flooring on concrete surfaces, old floors with terrazzo tiles, ceramic tiles and natural stone, etc.

Coating industrial floors before application with epoxy based products in chemical, food, textile and leather plants.

Polished floor construction inside shopping malls, showrooms, shops, restaurants, apartments.

## **SPECIFICATIONS**

**LB GROUT SL-2** is a self-leveling, light gray powder (cement-based mortar) composed of a quick-drying and curing binder, selective silica sand, synthetic resins and special additives. specially researched and developed by **LONG BINH**'s laboratory.

When mixed with water, **LB GROUT SL-2** forms a self leveling grout that is easily applied by hand or by pump with a thickness of 5-40 mm per coat.

When curing (about a few hours after application), **LB GROUT SL-2** achieves very high compressive and flexural strength, with very good adhesion to the construction surface. In addition, thanks to the special ingredients, fast curing ability, the surface applied with **LB GROUT SL-2** allows other finishing works after a very short waiting time.

Approximately 3 days after application, **LB GROUT SL-2** floors can be dry polished using diamond grinding discs to achieve the same absolute flatness as natural stone surfaces.

# RECOMMENDATION

Do not add water to **LB GROUT SL-2** grout once it has begun to set.

Do not add lime, cement, gypsum powder or other binders to **LB GROUT SL-2** mortar.

Do not use the **LB GROUT SL-2** on a floor area with moisture infiltration (refer to LONG BINH technical support).

Do not use **LB GROUT SL-2** as a floating screed. **LB GROUT SL-2** must be applied on hard and stable surfaces.

Do not use the LB GROUT SL-2 on wet surfaces.

Do not use LB GROUT SL-2 on metal surfaces.

Do not use **LB GROUT SL-2** at temperatures below  $+5^{\circ}$ C and above  $+35^{\circ}$ C.

The color of the substrate applied with **LB GROUT SL-2** is not always uniform, which is typical of cementitious products.

In addition, different construction methods will also have different colors. At the same time, to ensure absolute flatness for the construction platform, it is necessary to apply the product continuously, avoiding long breaks.

# INSTRUCTIONS FOR PREPARATION AND APPLICATION

Products containing cement may cause irritation when in contact with body sweat. Use gloves and safety glasses when handling the product and follow the usual warnings when handling chemicals.

#### **CONSUMPTION**

**LB GROUT SL-2** used pure: 16.5-17.5 kg/m<sup>2</sup> per cm of thickness.

#### PACKAGING

Available in 25 kg bags.

#### **STORAGE**

Store LB GROUT SL-2 for approximately 12 months in its original unopened packaging in a dry place. When stored for a long time, the curing time of LB GROUT SL-2 increases but does not affect the final product properties.

#### **APPLICATION PROCEDURE**

#### **Preparing the substrate**

The application surface must be firm, dry, clean, and free of dust, grout, paint, wax, grease and other impurities.

Apply a layer of compressive tape around the perimeter of the work area and around areas where volume distortion needs to floor-piercing cylinders (such as columns and pillars).

Concrete, ceramic tiles, natural stone surfaces must be mechanically cleaned by sandblasting or grinding and then treated with a Primer connection layer (1 liter of **LB-Latex** + 1 liter of water + 4 kg of cement: for 6 m2). Where necessary, reinforced with fiberglass mesh should be used for locations prone to cracks.

Allow Primer to dry for about 5 to 10 minutes (depending on ambient temperature) before applying **LB GROUT SL-2**.

For surfaces with cracks, Sikadur 731 should be used to repair the surface before application.

# Mix mortar

Pour 5.0 - 5.5 liters of water into a clean bucket or bucket, slowly sprinkle the 25 kg **LB GROUT SL-2** bag and mix thoroughly with a slow speed drill fitted with a suitable mixing blade until a mixture is obtained homogenous and no lumps within 3-4 minutes.

Let stand for 1-2 minutes for air bubbles to rise and break, then mix again before use.

It is recommended to mix a sufficient amount of **LB GROUT SL-2** for 15 minutes at +23 C.

The time to use mortar can be increased or decreased depending on the temperature of the environment at the time of application.

When applying **LB GROUT SL-2** on medium or large sized surfaces, a vertical mixer should be used to mix the required amount of mortar.

If using a mechanical mixer, the amount of mixing water is equal to the amount of water when mixing by hand. Mix well until a homogeneous mixture is obtained.

The mechanical mixer is an indispensable machine when applying **LB GROUT SL-2** with a mortar spreader because it is the only method to ensure the uniformity of the mortar spread during application.

# Laying the mix to obtain a "natural" effect and a "polished" effect

Spread **LB GROUT SL-2** by hand or with a mechanical means (rendering machine with a wormscrew feeder) in a single layer of 5 to 40 mm and a smoother for a natural finish, or at a thickness between 10 and 40 mm if the floor is to be polished. Make sure that the material is cast in a regular, continuous flow without interruptions, to avoid defects in flatness and particularly visible differences in colour. It has self-levelling properties, **LB GROUT SL-2** eliminates all imperfections left by the smoother.

When applying the product, respect the expansion joints in the substrate and form distribution joints at least every  $50 \text{ m}^2$ . With heated floors, the bay size must be no more than 25-30 m<sup>2</sup>. If **LB GROUT SL-2** is applied in civil buildings (appartaments, shops, etc.) where the rooms are smaller than 50 m<sup>2</sup>, include distribution joints in correspondence with door-sills or where there is a significant variation in volume in the rooms to be coated.

Use a fast curing, high ductility and high modulus polyurethane sealant (Sikaflex Construction), to seal structural joints and expansion joints up to 20%.

Before proceeding to seal the joints, it is recommended to insert foam foam into the joints to prevent glue from sticking to the bottom of the joints.

Floors applied with LB GROUT SL-2 can be left natural or polished if high aesthetics are required.

# "Natural" effect mortar

If the floor only needs to be left to natural, about 3 days after application, it should be protected and waterproofed with one of the finishes in the **LB**-**Hardener Liquid** product line - the finishing product. resistant to dirt, increase surface hardness, increase wear resistance.

### 'Glossy' effect mortar

Dry polishing with a diamond-tipped grinder can be done about 2-3 days after application. At this point, the surface is completely flat and shiny, capable of reflecting light, similar to when tiling with natural stone (such as granite).

After dry polishing, the surface forms tiny waterabsorbing holes and needs to be re-plastered with **LB-Matit**, a specialized product for filling tiny holes in the surface after the primary surface treatment process. set. The **LB-Matit** has the same color as the **LB GROUT SL-2**.

The polishing process is completed, followed by a finishing treatment with **LB-Hardener Liquid** - a finish that is resistant to stains, increases surface hardness, and increases wear resistance.

Then, coat with a polymer-based varnish for increased shine, stain and oil resistance.

Note: If you need any information about tools for dry polishing, contact the technical support service department of **LONG BINH**.

# Cleaning

Rinse tools with clean water while the **LB GROUT SL-2** is still wet.

No.	Technical properties	Units	Quality	Test Method
1	Slump of mix mortar	cm	22-30	Suttard pipe
2	Compressive strength	N/mm <sup>2</sup>		TCVN 3121-11:2003
	- 24 (hours)		≥ 20	
	- 72 (hours)		≥ 25	
	- 7 (days)		≥ 30	
	- 28 (days)		≥ 40	
3	Flexural strength	N/mm <sup>2</sup>		TCVN 3121-11:2003
	- 24 (hours)		≥ 5	
	- 72 (hours)		≥7	
	- 7 (days)		≥9	
	- 28 (days)		≥11	
4	Adhesion strength on the concrete surface M200	N/mm <sup>2</sup>		ASTM D7234
	- 24 (hours)		≥ 1.0	
	- 28 (days)		≥ 1.0	

# **TECHNICAL PROPERTIES OF LB GROUT SL-2**

<u>Note:</u> Techinical information and directions for use this product based on knowledge and practical experience of us. Above information general nature only, when used product need to check for each specific case.

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