

Technical 15.01.2015

## Fast self-leveling screed

Based on cement, 2-10 mm, for indoors

### Use:

Self-leveling screed mortar for indoors application in 2-10 mm layer, to level cement screeds and concrete surface, in order to finish with linoleum, PVC, carpet, hardwood flooring, floor tiles, etc., in area with light pedestrian traffic after approx. 3 hours after application.

APPLY ONLY ON MINERAL BASES.

Product does not apply on wood, plastic, metal, etc.

### Characteristics:

- Final smooth surface
- Easy processing
- High resistance
- Light traffic approx. 3 hours after application

### Technical data:

Item No.:	SAR 2 - 10
Material foundation:	Cement, mineral aggregates, polymers, plasticizers
Class or mortar:	CT-C20-F5-A15 according to SR EN 13813 / 2003
Compressive strength:	C20
Tensile strength:	F5
Resistance to wear:	A15
Bucket time:	Max. 40 minutes
Air/substrate temperature when placing:	Min. +5°C max. +30°C
Consumption:	Approx. 1,5 – 1,8 kg / m <sup>2</sup> / mm
Packaging:	Paper bag resistant to humidity
Delivery:	25 kg
Storage / Validity:	12 months from date of fabrication on the packaging, according to Directive 1907/2006/EC and GR 932/2004, at 20°C and 65% relative humidity. Store in dry spaces on wooden pallets.

Technical data and those related to consumption are determined in standard conditions.

There may be differences depending on conditions of applications.



**Base:**

The mineral support layers must be at least 28 days old, respectively they must be completely hardened and dried. Very thick concrete elements, over 20 cm, must be at least 3 months old. Pressure water and humidity must not come from the support layer as it does with concrete poured directly on the ground, without insulation. Surface of the support layer must be resistant, clean, dry, without cracks or fissures, adherent and compact, free of grease, dusts, loose debris, salts or other material than can form a separator layer. Fragile portions and mortar residues must be removed. The most important feature of the support layer when applying a self-leveling screed, is its resistance to tearing, which must have a minimum value of 0,8 N/mm<sup>2</sup> for light traffic and minimum 1,5 N/mm<sup>2</sup> for heavy traffic.

For the professional determination of resistance to tear, stick a steel disc with a hook (50 mm diameter) on the surface with suitable two-component epoxy adhesive. After the two-components adhesive has dried (approx. one hour), pull the disc with a suitable measuring equipment. Resistance to tear is determined in minimum 5 places, depending on the size of the surface.

If the resistance to tear of the base is below the minimum recommended values, it is necessary to polish the base to remove the fragile layer at the surface.

If the base has a fragile mass, you can opt to harden it with Shomburg Remisil SI, silicate binder solution.

If conditions for resistance to wear of the base are not complied with, the risk of layers detaching increases.

Depending on the absorption of the base, it is properly primed, respectively treated. To determine absorption of the base, it is sprinkled with water. If water drops are absorbed in 10-20 sec., the base is absorbent. If water drops remain visible on the surface, the base is poorly absorbent or not absorbent.

On very absorbent bases, apply ADEPLAST® Acrylic Primer for self-leveling screed. Product can be diluted in a maximum ratio of 1 : 4 with water, to adjust to the base absorption. If in its most diluted form the primer is not absorbed and forms a film on the surface, the base has a very low absorption or no absorption at all.

On bases with reduced absorption, especially on base with no absorption, use an adherence bridge achieved with SCHOMBURG INDUFLOOR IB 1240 sprinkled with quartz sand 0,5 – 1 mm.

During application, hardening and setting, minimum 7 days, air and base temperature must not drop under +5°C.

Prior to applying the self-leveling screed, fix marginal dilatation profiles, next to walls, piers, etc. to absorb tensions and avoid cracks.

**ASPIRATE THE SURFACE BEFORE APPLYING THE PRIMER AND THE SELF-LEVELING SCREED! DUST IN THE BUILDING SITE AREA WHICH IS DEPOSITED ON THE SURFACE BEFORE APPLYING THE MATERIALS, FORMS A SEPARATOR LAYER AND IS THE MAIN CAUSE FOR THE SEPARATION OF THE SELF-LEVELING SCREEDS!**

**Processing:**

Introduce the material into water, 25 kg are mixed homogeneously in approx. 5 liters of clean water, respectively 0,20 liters of clean water for 1 kg, with an electric mixer at low speed, to avoid air accumulation in the material. Leave to rest approx. 10 minutes and then give a brief, vigorous mix one more time.

Check compliance with consistency of the material. Position a PVC tube with 110 mm interior diameter and 10 cm long, vertically on a flat surface. Fill the tube with material (1 liter) and pick it up from the surface. Measure the diameter of the disc of material you obtained. At a correct consistency, diameter of the disc of material falls between 53 and 56 cm. Consistencies different from the recommended one, bring along the risk of fissures, detachments or segregations.

Material is poured on the base and is de-aerated with a spiked roller. Surface can be leveled with a leveling board or a screed grouter. De-aeration and leveling are done within 15-20 minutes since application. After this period, the material starts to harden and cannot be processed additionally. Final setting of the material occurs maximum 40 minutes after application. At the end of the setting, material hardens visibly within seconds, surface gets hot and then cools off slowly. This is a normal phenomenon and does not affect the quality of the applied layer. Under high temperature, this period is reduced.

Surface can be used after minimum 24 hours for ceramic plating and minimum 72 hours for hardwood flooring or carpets. Especially when laying hardwood flooring, it is imposed to measure in advance the humidity of the layer and the base, in accordance with the requirements of the hardwood flooring manufacturer. The drying periods are presented under normal temperature and humidity conditions, respectively 20°C and 65% relative humidity. Low temperatures and high air humidity prolong the drying time of applied layers.

**Important:**

- Product is not used for flooring with industrial traffic;
- Consideration must be given to additional measures for the protection of surfaces against fast dehydration, bad weather or frost;
- Avoid direct exposure of surfaces to sunlight during adhesion;
- When applying on floor heating system, request the manufacturer's approval. In any case, floor heating must be turned off with 24 hours prior to applying the material, and turned on after complete drying and hardening of the material;
- Joints in the base must be assumed from the base. Consider casting surfaces of maximum 6 x 6 meters;
- Comply with the information in the technical security sheet;
- This technical sheet replaces all previous versions. Information in this technical sheet represents our experience with this product up to this day. This technical sheet does not clear the user of the product from making his own decision and evaluation including by samples, regarding the appropriateness of using the product. SCHOMBURG / ADEPLAST products as well as their aggregate raw materials are continuously monitored in our own laboratories for consistent quality. Our advisory service is available for questions regarding product application and demonstrations. Comply with the information in the security technical sheet.