

**Self-Leveling Cement Based, >1.20-35mm thick Smoothing Compound****Under Lay Floor Covering Smoothing System****Description**

**Cem Bond 1K**, is a partially self-smoothing water with polymer cement based screed with excellent properties of adhesion, flexibility and water resistance. Due to its special formulation, **Cem Bond 1K** can be used under a damp proof membrane. It is exceptionally easy to mix and produces very low drag on the trowel. In addition to these advantages, **Cem Bond 1K** can be laid from a feather edge up to at least 3mm to 20mm in a single application.

**Use**

To level uneven internal sub-floors to provide a smooth surface prior to the application of floor coverings. **Cem Bond SL 30** can be applied on all common sub-floors as concrete and cement/sand screeds, flooring grade asphalt, wood (see preparation below), quarry tiles, internal steel decks, etc.

**Preparation**

The surface of the sub-floor must be clean, sound and free from dust, plaster droppings, grease, paint, polish, and any water-soften able or loosely adhered materials. On absorbent surfaces it may be necessary to damp down, or prime the surface using the **Cem Bond Primer Coats** and allow drying before applying the **Cem Bond 1K** mortar. Where rising damp is present it is recommended that a suitable surface damp-proof membrane is applied on top of the hardened **Cem Bond 1K**. The adhesion and hardening of **Cem Bond 1K** unaffected by the presence of dampness in the sub-floor providing the floor is free of surface water. If sub-floors are impervious, e.g. flooring grade asphalt, or have adhesive residues that will be affected by subsequently applied adhesives, an overall application of **Cem Bond 1K** at least 2mm thick will be required. This is to ensure uniform drying of the new adhesive or to prevent interaction either with the old adhesive residues or with the asphalt sub-floor. Prior to leveling wooden floors, re-nail and firmly fix all loose boards. Where timber floors are sufficiently rigid but are uneven or worn, or where there is differential movement between floor boards, the technique is to pre-level the timber with **Cem Bond 1K** prior to screw or ring nail fixing 6mm to 12mm thick plywood sheet to provide a sound and stable base for the new flooring. In all cases sub-floor ventilation must be adequate to prevent deterioration and moisture movement.

**Application**

The mixed material is poured onto the prepared floor surface and spread with a trowel to the required thickness in one operation. Apply at temperatures above 5°C. **Cem Bond 1K** is partially self-smoothing, but should any trowel marks persist, the surface may be easily smoothed with a wet trowel once the material is "finger-tight", i.e. not fully hardened. This can usually be done after approximately 40 minutes at normal temperatures. Alternatively the trowel marks may be "stoned" down with a carborundum block once the material has hardened.



**Cem Bond 1K HP**  
Self-Leveling Cementitious Base



**Cem Bond 1K HP Quick Set**  
Self-Leveling Cementitious Base



**Cem Bond 1K Std**  
Self-Leveling Cementitious Base



**Cem Bond 1K Quick Set**  
Self-Leveling Cementitious Base

**Property of Technical Data = 4 grade of Self-Leveling Cementitious Base**  
See below properties details

		<b>Cem Bond 1K Std</b>	<b>Cem Bond 1K Quick Set</b>	<b>Cem Bond 1K HP Std</b>	<b>Cem Bond 1K HP Quick Set</b>
<b>Thickness Require mm</b>		<b>1.20-5.00</b>	<b>1.20-5.00</b>	<b>1.20-35</b>	<b>1.20-35</b>
Density Fresh Mortar		1.70kg/litre	1.75kg/litre	1.85kg/litre	1.85kg/litre
Initial Set (Vicat)	DIN 52450 / 25°C	60 mins	20 mins	60 mins	20 mins
Final Set (Vicat)	DIN 52450 / 25°C	>3.5 hour	<1.5 hour	>3.5 hour	<1.5 hour
Compressive Strength	DIN 52450 / 25°C	±23 N/mm <sup>2</sup>	±23 N/mm <sup>2</sup>	±35 N/mm <sup>2</sup>	±36 N/mm <sup>2</sup>
Tensile Strength	DIN 52450 / 25°C	2 N/mm <sup>2</sup>	2 N/mm <sup>2</sup>	2.6 N/mm <sup>2</sup>	2.6 N/mm <sup>2</sup>
Flexural Strength	DIN 52450 / 25°C	16 N/mm <sup>2</sup>	16 N/mm <sup>2</sup>	21 N/mm <sup>2</sup>	21 N/mm <sup>2</sup>
Ball pressure hardness (Brinell)/ 25°C					
After 24 hours		28 N/mm <sup>2</sup>	31 N/mm <sup>2</sup>	35 N/mm <sup>2</sup>	35 N/mm <sup>2</sup>
After 7 days		45 N/mm <sup>2</sup>	49 N/mm <sup>2</sup>	52 N/mm <sup>2</sup>	53 N/mm <sup>2</sup>
After 28 days		>62 N/mm <sup>2</sup>	>69 N/mm <sup>2</sup>	>75 N/mm <sup>2</sup>	>78 N/mm <sup>2</sup>

**Mixing with Water:** Ratio # 25kg bag **Cem Bond 1K** with 4.5-6.0 kg **Water** with mixing container.

**Thickness**  
The standard mix is suitable for applications from a feather edge up to 15mm, however for thicknesses above 35mm the incorporation of up to an equal volume of 3.00mm Ø single sized aggregate will prove economic. For thicknesses exceeding 1.2mm and up to 35mm an equal volume of a suitable size of graded aggregate should be incorporated in the standard mix. Mixes with a high aggregate content may require a subsequent smoothing application of the standard mix of **Cem Bond 1K** and, if this is carried out when the aggregate filled mix has dried priming will help prevent air bubbles, suction and also prolong the flow life.  
Note that flooring grade asphalt should not be covered with more than 5.00 mm of underlayment.

**Cleaning of Equipment** All tools and mixing containers should be washed and cleaned in water immediately after use before the material sets.

**Drying and Hardening** At normal temperatures:-working time approximately 25 minutes. Workability approximately 15 minutes until 60 minutes depending on thickness and site conditions. A 2mm thick **Cem Bond 1K** screed is suitable to receive most floor coverings after 4 hours. The setting and drying characteristics have been selected to suit most conditions and types of surfaces to be screed, enabling **Cem Bond 1K** to be used for almost every conceivable application. The setting, hardening and drying times will be extended at low temperatures. Thicker applications will require a longer time to dry.

**Coverage** Approximately 1.70kg screed mortar/m<sup>2</sup>/mm, e.g. one bag will cover approximately 4.70 – 4.90/m<sup>2</sup> at 3mm thickness/25 kg bag.

<b>4 Grade of System</b>	<b>Cem Bond 1K Std</b>	<b>(Standard)</b>
	<b>Cem Bond 1K Quick Set</b>	<b>(Quick Set)</b>
	<b>Cem Bond 1K HP Std</b>	<b>(High Performance)</b>
	<b>Cem Bond 1K HP Quick Set</b>	<b>(Quick Set &amp; High Performance)</b>

**Packaging** Net weight 25.00 kg bag

**Storage Shelf Life** **Cem Bond 1K (4 Grade)**, 9 months if stored in dry conditions.

#### Handling Precautions

Wash off any mortar or latex on the skin before it dries. During mixing and application ensure adequate ventilation since the latex component contains ammonia which is volatile and may cause eye watering in confined spaces. Avoid generation of airborne dust during mixing. Cem Bond powder contains more than 20% Portland cement and, therefore, in line with current legislation, is classified as irritating to eyes and skin. For this reason the following precautions should be observed:-

Avoid contact with the skin and eyes; in case of contact with the eyes, rinse immediately with plenty of water and seek medical advice; wear suitable gloves and keep the product out of the reach of children.

#### The General Term & Conditions

All recommendations for use of our product, whether given by us in writing, verbally, or to be implied from the results of tests carried out by us are based on the current state of our knowledge. Notwithstanding any such recommendations the Buyer shall remain responsible for satisfying himself that the products as supplied by us are suitable for this intended process or purpose. Since we cannot control the application, use or processing of the products, we cannot accept responsibility therefore. The Buyer shall ensure that the intended use of the products will not infringe any third party's intellectual property rights. We warrant that our products are free from defects in accordance with and subject to our general conditions of supply.

The above mentioned details Specified key data are individually checked throughout, guarantee, and included in the certificates of Analysis (CoAs). & Typical key data are spot checked, the value are typical for the product and are indicated for information only. The values are not guaranteed or included in the CoAs.



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