



Söderköping June 12, 2019

## HTC Superfloor™ Gold

For HTC Superfloor™ Gold the following special requirements apply for concrete surfaces that are to be given a final finish by polishing according to the HTC Superfloor™ concept.

### CASTING

For the floor to have a uniform appearance, the casting is of the greatest importance. (A poorly cast floor will be costly to grind, and even if the function of a polished floor can be achieved, the finish will be affected by uneven aggregate, cracks, etc.) The HTC Superfloor™ method is not in itself a method for preventing cracks in the floor, etc.

Thanks to experience from earlier examples, we can give the following tips on points to consider before casting:

1. The surface should be power floated. (To achieve a surface as pore-free and level as possible, thorough power floating is required).
2. The surface should be power trowelled.
3. Normally, the concrete surface should be water hardened under plastic sheeting for 5 -7 days after casting, before it is time to start grinding. Grinding and honing can be carried out at this time while polishing is left until a later date, when the moisture level in the concrete is lower.
4. The surface must not be waterlogged when impregnating. Maximum 5% water content. (This is to enable the silicate solution to penetrate and react with the concrete.)
5. If the finished floor is to fulfil class A as per Hus AMA 14, table 43 DC/1, the floor must also fulfil identical requirements before the HTC Superfloor™ method commences. The same also applies for class B floors. (This is very important to remember when planning. The existing concrete surface is finished by grinding. Minor irregularities can be corrected, but the grinding will be more time-consuming.)

## **GRINDING PROCESS**

The first grinding step is intended to remove the concrete skin and expose the underlying fine material. Normally, only 1 mm of the surface is ground.

After grinding the Brown step, the surface is inspected for cracks and pores. Where necessary, pores in the surface are filled e.g. with HTC Grouting, if ordered by the customer.

In the grinding process, the concrete surface is treated with densifier, HTC Cure+.

After the final polishing step\*, which should be Green resin bond diamond (such as DX10, FL10, FENIX10 or FP10), the floor is cleaned using an auto-scrubber and diamond impregnated pad and a suitable stone soap, mixed in water according to the dosing instructions.

Alternative to the last instruction, if increased protection against penetrating liquids is required: After the final polishing step, the concrete surface is treated with HTC Stain Protection. This must be ordered as additional work.

## **THE FINISHED FLOOR**

A concrete floor that has been finished to a HTC Superfloor™, can be put to use immediately and already has characteristic such as smoothness, high cleanability, good friction as well as high resistance to wear and great durability. The floor is very easy to clean and to maintain these characteristics it must be cleaned using diamond impregnated pads (3000 grit), which also provides continuous floor maintenance. The cleaning is completely free from chemicals and only uses pure tap water as additive. Because concrete is mainly a natural material, it can be an advantage to add natural stone soap, when needed, to the cleaning process.

If finishing has been carried out using HTC Stain Protection, the floor has an increased protection against stains, which means that most liquid spills can be wiped up within 30-45 minutes without any residual stains.

For newly ground concrete floors: Avoid letting residual water in the form of pools/rivulets dry out/evaporate as this can cause a reaction in the form precipitation or permanent variations in the surface. The resistance increases with time and after approx. 2 months, reactions are not likely. However, large quantities of liquids should not be left to dry on the floor because an HTC Superfloor™ is not a sealed floor. Concrete does not withstand corrosive substances such as strong acids and alkalis, which must be removed immediately.

If the floor is covered with protective material\*\*, it is important that the entire floor dries out at the same rate, because it would otherwise result in permanent colour differences. Do not use tape directly on the concrete.

*\*See the complete grinding process for HTC Superfloor™ – Gold in the HTC Grinding Guide available at [www.htc-floorsystems.com](http://www.htc-floorsystems.com)*

*\*\*Preferably, use protective covering that breathes such as Ramboard.*