

**HTC
Superfloor™**



Definition

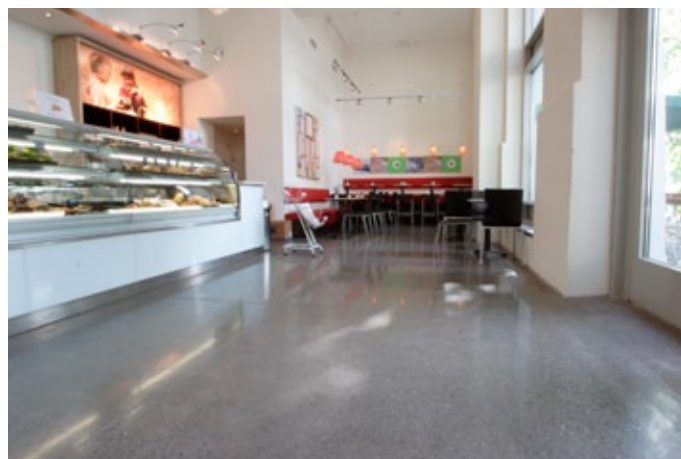
HTC Superfloor™ is a complete concept for polishing concrete. The method mechanically refines the concrete surface by removing the top cement paste and expose the underlying stronger concrete. The existing concrete is grinded and polished with HTC's effective machines and diamond tools. The result is a floor with a completely flat surface, with high qualities both functional and aesthetical.

Suitable environments

HTC Superfloor™ is suitable in both industrial and public environments. Mechanical and automotive industry, storage areas for consumer products and groceries, shops and educational facilities with demands for durable, flat, hard and aesthetically appealing floors are examples of suitable applications.

Benefits

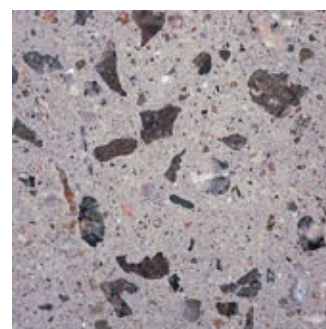
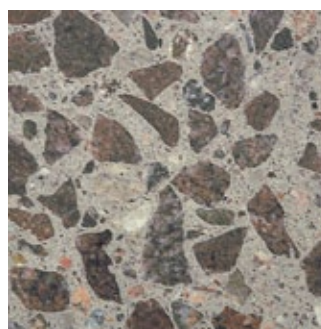
- **Ecological - concrete consists of natural material**
- **Long life time and minimal maintenance gives low LCC-cost (Life Cycle Cost)**
- **No diffusion proof coating**
- **Greatly improved cleanability**
- **Improved inner environment, brighter and more clean premises**
- **Less vibrations for truck operators because of the flat surface**
- **Silent truck traffic**
- **No tyre marks from trucks**



The HTC Superfloor™ in a bakery, Norway



The HTC Superfloor™ method in a warehouse, Sweden



Examples of various concrete with pigmented cement and visible ballast

Technical characteristics

The HTC Superfloor™ concept has been tested for abrasion resistance at SP Technical Research Institute of Sweden. The results prove that a floor grinded in accordance with the HTC Superfloor™ concept has 5-10 times better abrasion resistance than the requirements for "very high" resistance according to the standard (test performed on C 28/35 concrete).

Tests	Standard
Abrasion resistance	SS 13 72 41
	pr En 13892-3, Böhme
Hardness	SS 13 72 37
Slip resistance	pr EN 14617-3

Other tests: Reflection and gloss test have also been performed at SP*, but without a set standard. Nevertheless, experience shows that both light reflection and glos value are increasing when polishing in accordance with the HTC Superfloor™ concept.

*SP Technical Research Institute of Sweden

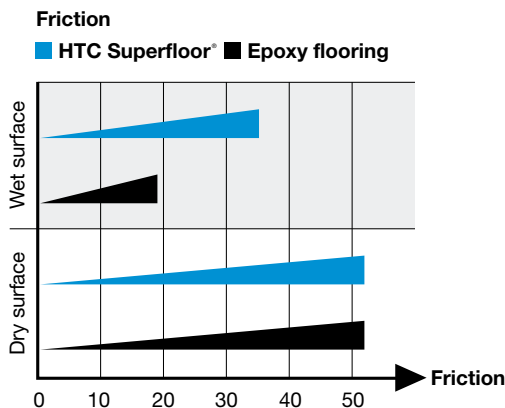
Fire Classification

The European Commission has appointed the HTC Superfloor™ which is a mechanically treated concrete surface, the highest European Classification, A1FL (Commission Decision 96/603/EC) and is therefore regarded as being incombustible/non-inflammable.

Friction

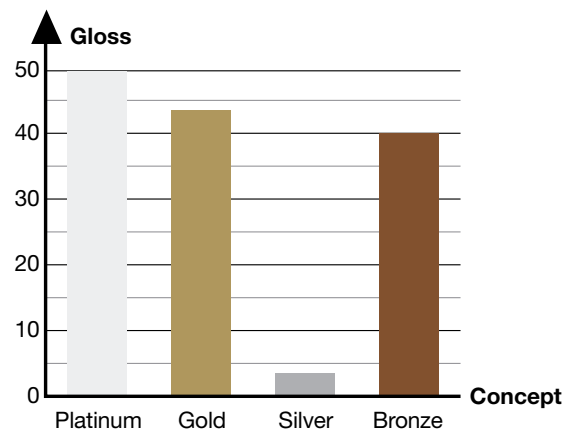
Friction/Slipresistance measured by SP Technical Research Institute of Sweden according to the pendulum friction method: prEN 14617-3

	Dry surface	Wet surface
Resin floor	52	18
HTC Superfloor™	52	35



Source: SP report P303050, EN14617-3

Gloss value



ESD - Electrostatic discharge

The resistance measurements performed, both on the concrete slab, the ground and the joists, shows that the HTC Superfloor™ fulfills the standard "SS-EN 61340-5-1". Measured values also meet the requirements of the international standard IEC - International Electrotechnical Commission.

Walk Around test with ESD shoes gives in general low or no electrostatic discharge. In no cases has the HTC Superfloor™ exceeded the threshold values of the ESD standard. We still recommend the use of ESD shoes in combination with the HTC Superfloor™, especially when handling electronics with a maximum of 100 voltages.

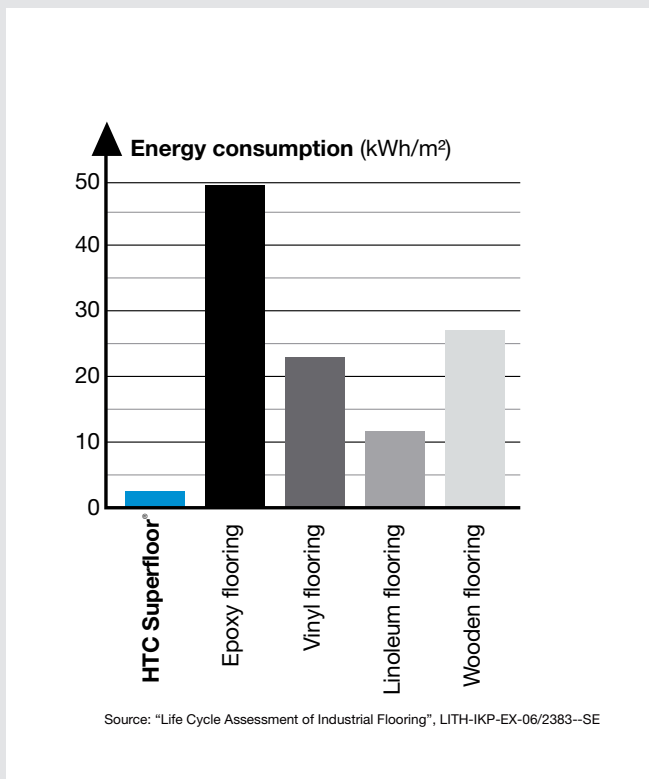
Truck marks

HTC Superfloor™ is an excellent surface for warehouses and logistic centres. Traditional resin floors or untreated concrete floors quickly become marked by truck tyres.

The picture to the right shows the brake marks left by a truck on both an untreated concrete floor and at the HTC Superfloor™.



Energy consumption



Life cycle cost

Comparison of life cycle costs for a HTC Superfloor™ and a resin floor.

The results show the life cycle cost of a HTC Superfloor™ in a store or similar which is cleaned every day is 65% lower than a resin floor. The cost for a warehouse or an industrial plant that is cleaned once or twice a week is approximately 80% lower when using a HTC Superfloor™.

The initial cost of a HTC Superfloor™ compared to a resin floor is very similar. However, the life span of these two types of floor differs greatly with the resin floor incurring higher life-cycle costs. A HTC Superfloor™ that is maintained using the TWISTER system has, in principle, a limitless life-span.

The comparison was based on maintaining the HTC Superfloor™ using the TWISTER method while the resin floor being cleaned using traditional methods and chemicals.

TWISTER

The TWISTER cleaning system from HTC Sweden cleans, polishes and maintains floors. The system does not require traditional cleaning solutions, wax or polish products as the TWISTER system is much less aggressive. The result is a clean floor with a wonderful lustre and a shine that remains day after day. The TWISTER system is simple to use and suitable for most of the autoscrubbers in use throughout the world. The TWISTER system has been recommended by the SSNC, Swedish Society for Nature Conservation. If all the professional cleaning companies in Sweden used the TWISTER method, cleaning chemical consumption would be reduced by 5-7 million litres per year only in Sweden*.

*SSNC has released a report called "Environmental floor care". The summarization is that between 5 – 7 million litres of traditional aggressive cleaning chemicals can be saved only in Sweden during a year. The effects in a global perspective are enormous.





HTC Superfloor™ Platinum

Our HTC Superfloor has changed name into HTC Superfloor Platinum. It's the same grinding process in seven steps as before.



HTC Superfloor™ Gold

This is a five step grinding and polishing method rounded off with cleaning/polishing using TWISTER™ Green. Less aggregate will be exposed as you are not grinding as deep into the concrete.



HTC Superfloor™ Silver

The silver process is a version of the HTC Superfloor™ Platinum where you grind as deep into the concrete but not for as long. This produces a finish that is less glossy than the HTC Superfloor Platinum. It involves four grinding steps rounded off with using TWISTER.



HTC Superfloor™ Bronze

HTC Superfloor™ Bronze is a version of HTC Superfloor™ Platinum. Grinding/Polishing in three steps, and finishing off using HTC TWISTER™. The HTC Superfloor™ Bronze concept involves polishing the top layer of the surface paste. The surface paste itself is not ground away. Together with a densifier (HTC Cure), this polishing method strengthens the surface paste and makes it easy to keep clean.

