



# CASE HISTORY ~ CH-006

## BIO-FLOR 182 COLORED QUARTZ SYSTEM SAVES CHEESE FACTORY FLOOR

**THE CHALLENGE:** A cheese factory floor in South Dakota suffered extreme damage from dairy acids. Two successive applications of a “quarter inch topping” had failed and the owners were considering yet another epoxy screed application with no guarantee of success.

**THE SOLUTION:** A TFT representative discussed the BIO-FLOR 182 system with the owner as an alternative to quarter inch screeds. These heavy, sand-filled materials can provide excellent surfaces in some applications however in order to be able to consume the large amounts of sand in their formulations they tend to have severely compromised chemical resistance. Since a quarter inch screed has a theoretical spreading rate of only 6.4 sq.ft. per gallon it follows that the material has to be formulated as cheaply as possible in order to allow an economic installation. Sand is inexpensive and an excellent filler, in order to incorporate the maximum amount into an epoxy screed coating it is necessary to severely compromise the resin system by using the maximum possible amounts of diluents’. These diluents are effective in lowering the viscosity of the resin however they have the effect of reducing chemical resistance with the result that although the screed floor may appear tough and hard it is in reality the chemical equivalent of a quarter of an inch of blotting paper.

An alternative to the screed coating is chemical resistant, self-leveling flooring. BIO-FLOR 182 was formulated to have uncompromised chemical resistance together with first-rate physical properties. This system utilizes an extremely chemical resistant epoxy resin matrix which is first applied to a prepared surface by roller and squeegee.

Colored quartz or other high quality fine abrasive is then broadcast into the uncured epoxy resin and allowed to settle through the wet film resulting in the maximum possible packing density without compromising the quality of the resin system. After the first layer of resin and quartz cures to the point at which it will bear traffic without leaving footprints a final seal coat of pure resin is applied. In this way a chemical resistant 35 mils thickness coating can be applied which easily outperforms typical 250 mil thick “quarter inch toppings”.

After learning about the BIO-FLOR 182 method the cheese factory owners opted to change their flooring system and try

BIO-FLOR 182. With the assistance of the local TFT representative and their own workers the old topping was removed and the new BIO-FLOR 182 system was installed over several weekends.

Application techniques were quickly learned and an attractive, highly functional flooring was installed which has easily outperformed the previous toppings.

**RESULT:** Instead of a major maintenance nightmare the cheese factory installed a hard, tough, long wearing and maintenance free flooring.

The BIO-FLOR 182 system remained hard, glossy and resistant to regular cleaning by harsh chemicals and very hot water.

For more information regarding this project, contact:

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PRODUCT: BIO-FLOR 182

YEAR: 1997

LOCATION: SOUTH DAKOTA

*We go where others fear to spread!*

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