

Comparison

Knowing your options

Selecting the right flooring solution for a dairy production facility is a common challenge. From wet production areas to extreme room temperature variances, along with the battle to control or eliminate bad bacteria, underperforming flooring is the last thing you want to know about.

We outline the challenges in our Guide 'Selecting the right flooring solution'. To read, visit www.alliedfinishes.com/dairy.

Considering the challenges, let's take a look at some of the flooring options available, and compare each one.

Ceramic Tiles

Ceramic Tiles are highly durable, and excellent for high traffic loads. They have good impact resistance and have a long life. They are, however, relatively expensive and require a long duration for installation. The permeable grout also makes cleaning and sanitising difficult. The grout lines need to be maintained so they don't harbour microbes, dirt and grease.

Quarry Tiles

Quarry tiles are, like ceramic tiles, highly durable and can stand up to high traffic loads. Similarly to ceramic tiles, the installation time is long, and they are relatively expensive. The grout lines make cleaning and sanitising challenging.





Epoxy Resin

Epoxy resins have a fast installation time, and are durable. High solid epoxies do provide good protection against acids and alkalis, but not strong protection against lactic acid. Epoxies also don't handle cold or thermal shock conditions very well. They do bond well to prepared concrete.

Polyurethane Cements

Polyurethane cements have a long service life. They have good resistance to thermal cycling, and excellent chemical resistance, especially to lactic acid. They are typically low odour, seamless, and easy to clean. Polyurethane cements have greater resilience and elasticity than epoxy resins, making them more resistant to scratching and marring. The elasticity makes this type of floor suitable for freezers where storage temperatures may reach -30°C.

In summary, while ceramic tiles or quarry tiles may be slightly more durable, polyurethane cements are the best option for dairy production facilities. Epoxies have the least in their favour for application in dairy production facilities – despite being long lasting and durable. Polyurethane cements are best suited to the dairy production industry, particularly with a high lactic acid resistance, and their suitability in ranging thermal conditions. Our recommended polyurethane cement product for dairy production facilities is SteriFloor Stärke. For more information, go to www.alliedfinishes.com/sterifloor