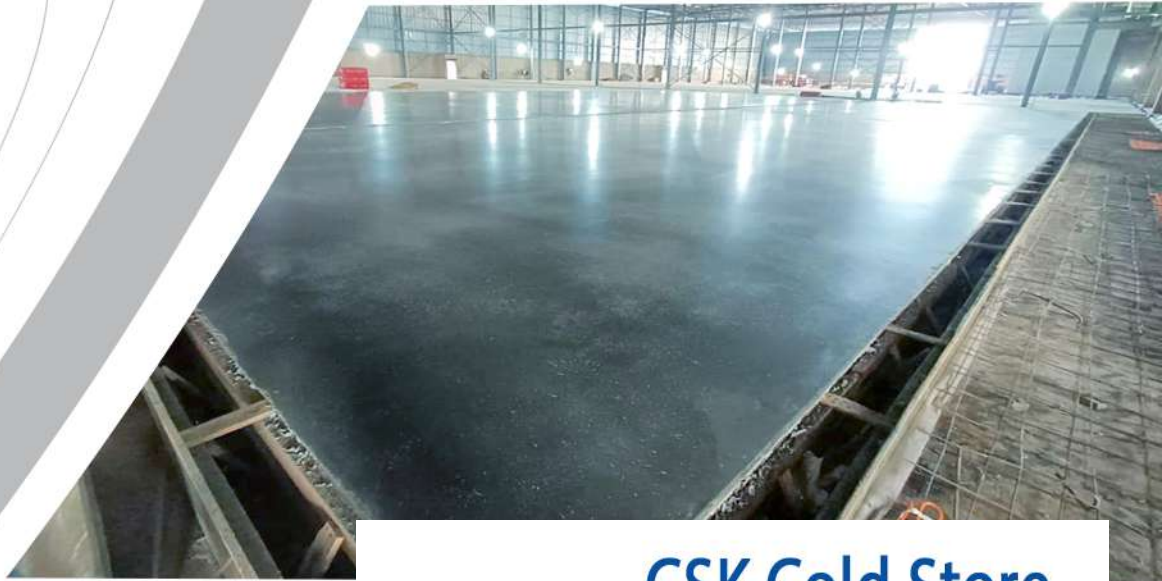


Project Spotlight



CSK Cold Store Tatu City, Kenya

Cold Store - SFRC ground bearing Twinplan®
'jointless' superflat floor slab

CSK is building a cold chain network across East Africa and the first of its kind cold storage facility is located in Tatu City, Nairobi, Kenya. The cold store required a 14,000m², superflat DM2 'jointless' concrete floor slabs, able to deal with temperatures ranging from 24 to minus 30 degrees and include the placing of rails inside the concrete floor slab for mobile racking. Twintec provided their unique total offer concept solution [Design-Build-Guarantee].

Cold stores are an excellent example where the interface management between subbase requirements, loads, choosing the correct heating system, placing of the heating system, cold store wall panels, door openings and transition areas into ambient area, racking system (often as in this case, mobile racking), floor flatness requirements etc. need close attention to the engineering & construction detailing.

This is where the knowledge & experience of Twintec adds value not only for the end user but also for the investor, facility manager, general contractor and the local interdisciplinary building teams. Especially in emerging markets, this value cannot be underestimated.



Project Data

End User:	CSK (Cold Solution Kiambu), Kenya
Main Contractor:	Seyani Brothers & Co
Consultant :	Mace
M2 :	14,000m ²
Completion Date:	October 2022

Project Spotlight



"There were several challenges on this project which needed to be overcome and this was professionally coordinated by Twintec to the point there were no delays or issues, and the work was carried out in record time to the highest standards.

From the onset they displayed an innovative, economic and proactive approach to service the project needs. They have been thoroughly professional in their conduct which resulted in a high-quality product".

Lionel Haggard, Technical Director, CSK

Design & Detailing: In the early planning stage of the facility, Twintec engineers were involved not only to design the concrete floor slab, but to work with the project team to optimise the cold storage building.

Coordinating the interface management & technical requirements between all disciplines was a critical success factor for the CSK facility from coordinating with the local engineer for the preliminary structural designs (substrate, subbase and floor) and every step of the way to completion of the project.

The coordination of interface management (earthworks, floor heating, insulating wall panels etc..) is key to make the design work.

Materials: A key part of the preparation is to analyse the concrete batch plant, local materials, the quality of the mixer trucks with detailed reporting on status and improvements to make - nothing is left to chance.

Fibres, joints, and hardeners were selected based on a number of factors, it is about making the right choices technically, economically, and environmentally.

Equipment: Twintec commits to its sustainability values throughout every aspect of a project and used the Topp & Screed Mini Electric Screed for the first time in Africa. The use of electrical equipment contributes to the reduction of CO2 and the working environment of our workers. A key requirement for Twintec's commitment to a sustainable future.

Execution - there is no substitute for experience.

With all the concrete floor slab details implemented and controlled and the flatness requirements adapted to suit the MHE, racking type and lay out, all requirements are fixed in working and execution drawings.

Twintec's international skilled execution team with a highly experienced on-site Operations Manager ensured that the DM2 tolerance was achieved within the project timeline.

Contact Twintec's international business team for further information:

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