



SMITHFIELD FOODS CHOOSES KOMPONENT® EXTENDED JOINT SLAB SOLUTION FOR BEST PERFORMANCE

Project Type:

Industrial

Application:

Slab-on-grade

Location:

Maryland

Project Dates:

April 15 – July 25, 2019

Project Owner:

Smithfield Food

Contractor:

The Fricks Company

Ready Mix Contractor:

Maryland Portable

Project Size:

575,000 sq. ft. (53,419 sq. m.)

Product:

Komponent®

Smithfield Foods is a U.S. food company renowned as the world's largest pork processor and a leader in many packaged meats categories. To produce these foods on such a massive scale, operational efficiency and facility up-time is critical.

When planning the new facility expansion in Maryland, Smithfield needed to ensure the slab-on-grade would be low maintenance to avoid impacting production schedules for repairs and allow for high-efficiency operations. This required a slab design that would minimize joints, eliminate curl, prevent cracking, and prevent dominant joints that affect operational efficiency and forklift equipment maintenance.

The contractor, Fricks Company, recommended using Komponent® shrinkage-compensating concrete for the project. This high-performance solution, uses the Komponent expansive cement additive blended with the local portland cement or Type 1L cement to create Type K cement concrete (ASTM C845, ASTM C878). For projects like Smithfield Foods, Komponent is often used in various areas of the project, e.g., slabs-on-grade, bulk non-shrink grouts, pavements and containment areas. Komponent is engineered to overcome negative volume change, eliminate drying shrinkage cracking, prevent curling and dominant joints, and improve the overall dimensional stability of the concrete.

PROJECT PROFILE

Due to limited silo space, the ready-mix producer, Maryland Portable, worked with the Fricks team to have Komponent® added at the jobsite. Fricks' portable silo and slurry units were used.

Due to hotter weather conditions during installation (April through July), slabs were placed in early morning, placing approximately 24,000 sq. ft. (2,230 sq. m.) each day with a hard trowel finish followed by a 7-day water cure. No saw cut control joints were needed throughout the facility.

Using Komponent shrinkage-compensating concrete, Fricks delivered an exceptional slab for this expansion that met the demanding performance requirements for this project.

Smithfield Foods can now continue to deliver high-quality foods to market while maximizing operational efficiency and minimizing maintenance and downtime.

For information on how Komponent can be used to provide a high-performance shrinkage-compensating concreting or grouting solution on your next project, contact a member of the CTS Cement Engineering Team at (800) 929-3030 or info@CTScement.com.

CTS Cement is the leading manufacturer of advanced CSA cement technology. The Komponent® shrinkage-compensating concrete & grout solutions are engineered to improve structural performance, dimensional stability, and durability by overcoming negative volume change, increasing density and lowering permeability. Rapid Set® products offer a wide range of concrete maintenance, repair and beautification solutions that offer speed and maximum durability without sacrificing performance.

Both Komponent® and Rapid Set® are low carbon footprint cements that provide unrivaled durability and design versatility while optimizing sustainable design – from manufacture to construction, in-service performance, and extended asset life.

For more information about CTS Cement products, please visit www.CTScement.com or call us at (800) 929-3030.

ABOUT CTS CEMENT