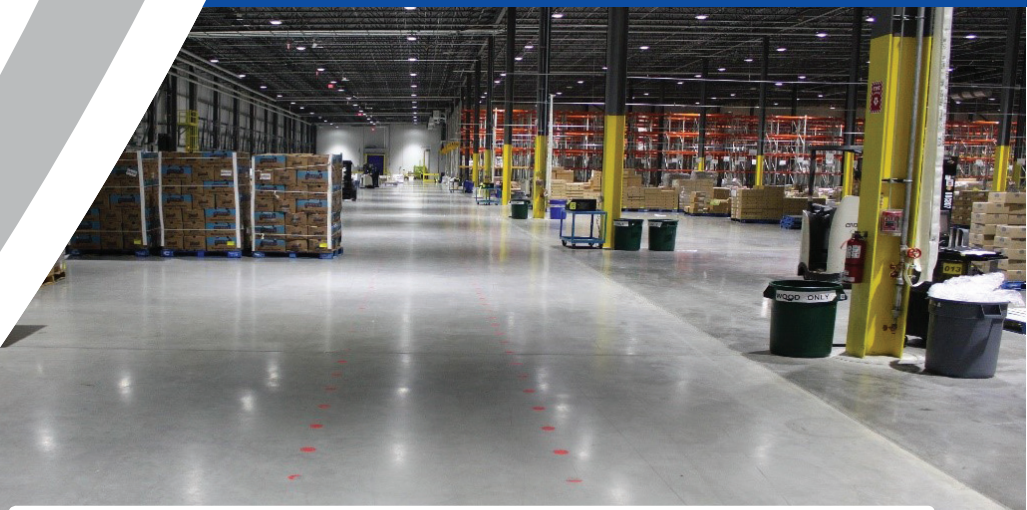


## Project Spotlight

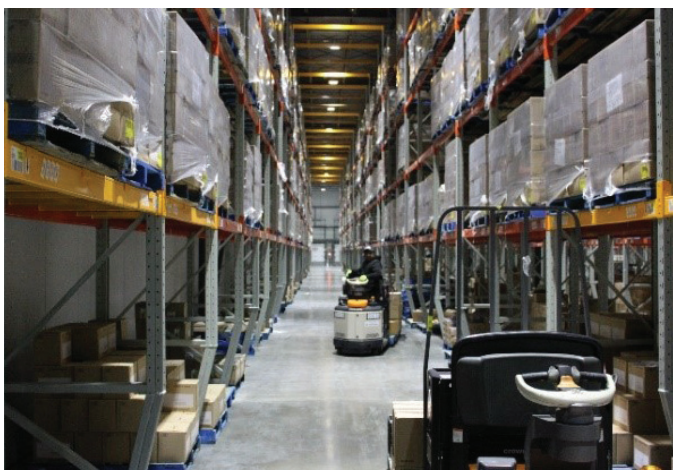


### Walmart Perishable Distribution Centre Calgary, Alberta

#### Design and Construction of a 370,000 ft<sup>2</sup> FREEPLAN™ Joint-Free Slab on Grade and on Insulation

Walmart Canada approached Twintec USA in 2009, exploring avenues to entirely suppress sawn joints at their newest facilities. Such initiative was driven by increasing forklift and slab maintenance costs, which Walmart intended to mitigate. In particular, forklift (MHE) wheel costs and productivity inefficiencies due to lower handling speeds were entirely caused by the operating MHE over damaged conventional slabs where sawn joints had curled, spalled or were broken. As discerning facility owners understand, all of these result in recurring, costly issues when operating conventional slabs. The Calgary PDC project was completed

in 2010 and included turn-key slabs on grade and on insulation, designed and built by Twintec. As of 2018, Walmart's PDC is one of Canada's largest refrigerated buildings and one of its most energy-efficient. At this project, the largest joint-free slab panel's footprint exceeded 19,000 ft<sup>2</sup>, with an overall joint reduction factor of about 92%, which is typical for Twintec USA. The remaining construction joints were full-depth, armored, cold-rolled steel joints. These construction joints feature optimal, continuous load transfer to support maximal slab durability and serviceability. In addition to the referenced Calgary PDC project, Twintec USA has successfully designed and constructed six other specialty, heavily-reinforced distribution slab systems for Walmart in MN, NC in the United States and AB and ON in Canada.



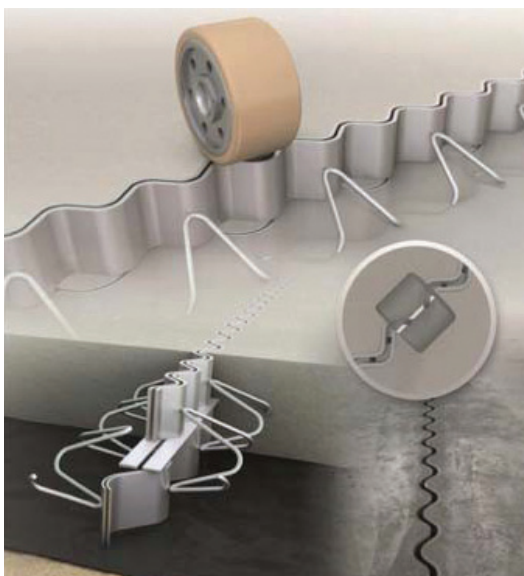
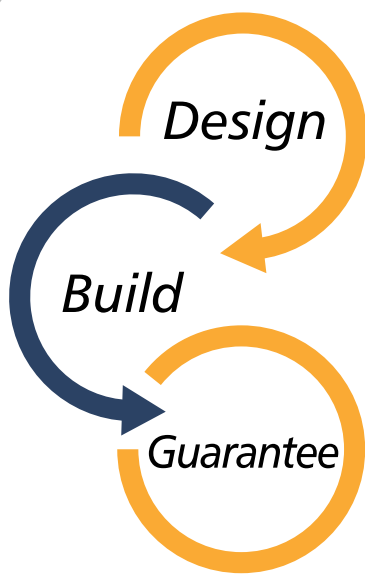
#### Project Data

|                     |                                   |
|---------------------|-----------------------------------|
| End User:           | Walmart                           |
| General Contractor: | Stuart Olson Const.               |
| Area :              | 370,000 ft <sup>2</sup>           |
| Slab Thickness:     | 6in / 8 in                        |
| Steel Reinf. Type:  | AFT 1/50 at 66 lb/yd <sup>3</sup> |
| Completion:         | May 2010                          |

## Project Spotlight



Walmart PDC in Calgary



### Design

Twintec is the leading and only specialty concrete engineering and install firm in the US. At Twintec, we believe our in-house engineering expertise goes a long way in assisting our clients. Twintec has developed the most advanced methods to design structural concrete bodies as applied to both joint-free, reinforced flooring systems and structural flat concrete bodies.

### Build

Twintec provides state-of-the-art install operations. Twintec USA crews are professionally trained to the global Twintec standards in terms of safety, quality, and operational excellence.

### Guarantee

Twintec provides a unique 5-year guarantee on their finished FREEPLAN™ products and design build services.

Contact the Twintec USA business team for further information:

**Tel:** (704) 896-5955 **Email:** [info@twintecusa.com](mailto:info@twintecusa.com)  
**Regional Office:** 19718 Zion Ave, Cornelius, NC 28031