

Nordica Warehouse – Sioux Falls, SD  
Submitted by: Concrete Materials Company

This is the second warehouse that Nordica has built thus far in the Foundation Court Commercial Development in the northwest corner of Sioux Falls. This warehouse is a mirror image of its predecessor and is built in two separate phases. This phase of the building is a 200,000SF build that will have a 100,000SF addition added in the near future.

The building is 570'x350', the floor was poured in 14 pieces in cooperation with the erection process. The floor is 6" thick, 4000 PSI with #4 rebar @ 2' OC. Empire designed their own leave-in-place form system with 3/4"x18" smooth dowels every 2' along each construction joint. The form system is adjustable and mounted by cranks that are honed-in during placement. Empire Building Construction, LLC. worked with Concrete Materials to design a durable mix design that resists shrinking and curling. The concrete for the flatwork was placed at an average 3.5"-4" slump. Empire used their Ligchine Boss 240 Laser Screed to strike-off the floor making it possible to pour large amounts of concrete in a days work. They panned the floor with a 10' and an 8' Whiteman pan machine and sealed the floor with both a densifier and a sealer. When the floors were finished Empire profiled the entire floor with a Face Companies Dipstick 2285 Floor profiler. The dipstick is the industry standard floor flatness and levelness measuring tool. Overall, the floor scored a combined 51FF and a 45FL making it far flatter and more level than industry standard specifications.