

Amazon Fulfillment Center – Sioux Falls, SD
Submitted by: Concrete Materials

Project Stampede is a distribution center located in Sioux Falls' Foundation Park. The total finished space on the five stories inside equals nearly 3 million square feet, making it by far the largest building in Sioux Falls and reaching 100 feet into the air.

The ground floor includes mostly warehouse space, with about 34,000 square feet split between the main office, recruiting office, break rooms and drivers lounge. The main office includes a classroom, training rooms, employee locker rooms and general office space. The upper four levels plus a mezzanine also are mostly warehouse space, with break rooms.

Concrete started in November of 2020 with the drilled piers and was completed in January 2021. There were 2 to 4 rigs drilling every day of the week in the beginning. Daily orders would range from 200 cyds to 500 cyds. Truck coordination and mix consistency were key to guarantee successful pours.

Construction on the building began in December 2020. Concrete Materials was responsible for delivering anywhere from 300 to 1200 yards a day from December until September. The only way to keep Project Stampede on schedule and keep the other projects in Sioux Falls going was to put a portable plant adjacent to the jobsite and utilize an outside trucking firm for the hauling.

Most of the mixes used on the project were normal commercial mixes, however, the SOMD and SOG mixes had to be engineered to meet specific parameters and performance needs. The engineer wanted the mixes to meet a desired coarseness factor range and workability range, be 8-18% on the intermediate sieves for the combined aggregates and have 7.5 lbs of Forta Fibers and the customer wanted a pumpable mix, that could go through 500 linear feet of pipe and have a placement slump of 7".

The SOMD pours were the most labor intensive. There were 2 crews starting at 3:00 am pouring simultaneously at 60-80 cyds an hour for each crew. The deck pours would range anywhere from 200 cyds to 900 cyds. There were a total of 72 SOMD and 22 SOG pours.

Chaz Miller, project manager for general contractor Ryan Cos said, "We're real happy with where things are at. On a project this size, you're always trying to find good key partners, and Concrete Materials been great to work with. They're very knowledgeable and accommodating. And pouring as much concrete as they do six days a week isn't an easy task. They have been a really good partner."