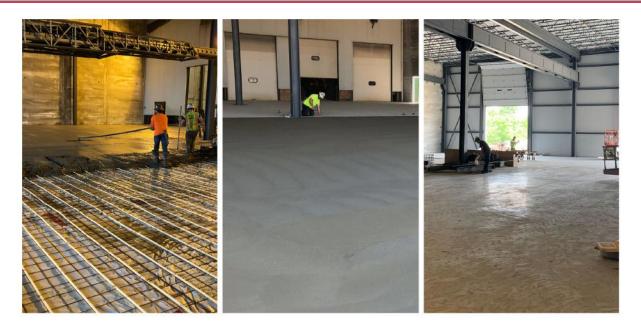
Conewago Manufacturing LLC

Hanover, PA





Project Summary

Conewago Enterprises, a leading design-build general contractor serving the mid-Atlantic region, recently constructed a 125' x 100' addition to Conewago Manufacturing's steel fabrication building. When planning the building expansion they requested a mix design that would have a low shrinkage value resulting in the ability to have a minimum amount of joints. The down time and maintenance issues associated with joints in a manufacturing facility were the main driver of the decision.

Conewago Ready Mix used a mix design that incorporated CarbonCureTM Technologies, which introduces recycled CO₂ into fresh concrete to reduce its carbon footprint, which increased the concrete's compressive strength and reduced the shrinkage with the reduction of cement. The mix design was further improved by incorporating 3% PREVent-C technology and 3 lbs of microfiber per cubic yard. PREVent-C blends expansive components with pore water surface tension reduction to defend against both autogenous and drying shrinkage cracks. Micro fiber allows the concrete mix to extend further.

The slab was poured in two placements. The first placement was 62.5' x 100' with a control joint cut mid span at 50'. The second placement was 63.5' x 100'. The slabs were 8" thick reinforced concrete poured over a double slip sheet on a well-graded compacted subgrade. The slabs incorporated diamond dowels for load transfer at the construction joint. The result is a crack-free manufacturing facility that Conewago Steel Systems uses on a daily basis.

Owner: Conewago Manufacturing, LLC

General Contractor: Conewago Enterprises, Inc. **Ready-Mix Supplier:** Conewago Ready Mix

Concrete Contractor: Keith D. Smith Concrete Contractor, Inc. Specialty Products: PREVent-C®, Micro Fiber, CarbonCure™

