

Fresenius Building

Slab-on-ground Assessment

Oregon, Ohio



CLIENT

Kodiak Management Company, LLC

CHALLENGE

Premature distress in a concrete slab-on-ground led to concerns regarding its long-term durability.

STRUCTURE

The Fresenius Building is an industrial warehouse building with a 6-inch-thick concrete slab-on-ground. After less than three years, the slab exhibited widespread cracking, wide joint openings, and excessive surface undulations.

SOLUTION

A review of the slab system indicated that it was generally well suited for the loadings that existed at the time of our evaluation. We also concluded that the observed distress was due primarily to curling with some evidence of localized soil problems; future distress related to these problems should not be extensive. Since, in general, the distressed areas of the slab system remained serviceable, we developed a series of recommendations to improve their stability and reduce the potential for future deterioration.