

## PROJECT

Nabisco Bakery  
Niles, Illinois

## CLIENT

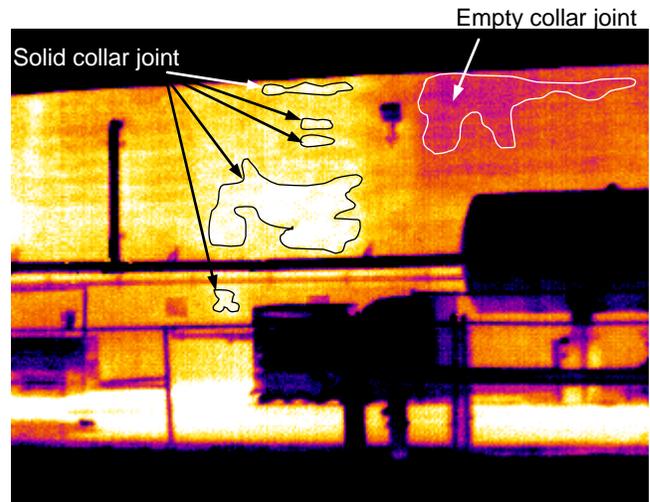
Kraft Foods, Inc.

## PROJECT DESCRIPTION

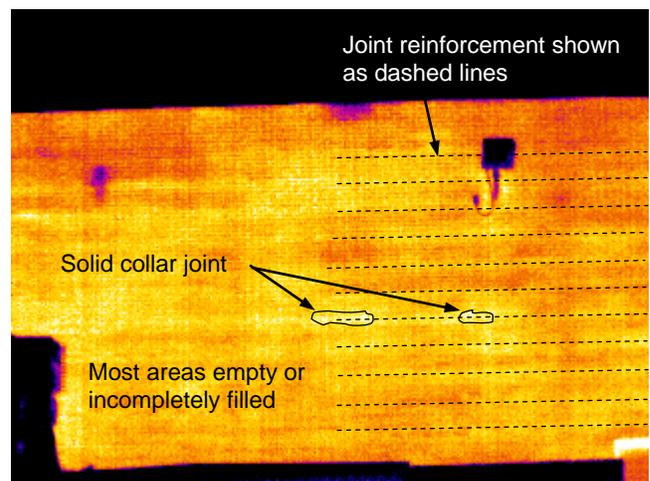
The bakery was built in 1957, with a structural steel frame and masonry infill panels as the building envelope. Exterior walls were built with a brick veneer over a concrete masonry backup, connected with wire joint reinforcement. In early 2001 bakery personnel noted that many of the mortar joints on the building's exterior masonry walls were deteriorated, due to severe corrosion of embedded steel reinforcement. A program to determine the existing condition of the exterior masonry and concrete walls was initiated to locate areas for repair. A full condition survey, including laboratory tests of building materials and engineering analysis of critical areas, was conducted. Results of this survey were used to prioritize repairs to damaged or deteriorated areas, including emergency stabilization. Subsequent project phases included design and specification of repair procedures.

## SERVICES PROVIDED BY ATKINSON-NOLAND

- Visual condition survey of the exterior building envelope and interior spaces for damage and deterioration
- Location of areas with severe corrosion damage requiring re-anchoring
- Development of wall section details describing as-built conditions
- Infrared thermographic scanning to locate deteriorated zones and identify repair areas
- Laboratory testing of mortar and brick samples
- Engineering analysis of displaced walls
- Design and specification of repairs
- Development of injection protocol to stabilize walls
- Quality assurance during repair work using infrared thermography



*Infrared image. Areas with solid collar joints show as hot (white) zones, whereas purple and black show cooler areas.*



*Air leakage through cracks caused by joint reinforcement corrosion shows as horizontal lines of higher temperature.*



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