Project Name:
Motorola Parts Building, Curtain Wall Rehabilitation

Project Location:
Schaumburg, Illinois

Client:
Jones Lang LaSalle
1301 East Algonquin Road, Room 0202
Schaumburg, Illinois  60196

Approximate Construction Cost:
Confidential

Year Completed:
2004

Nature of Services:
Evaluation, Repair, and Restoration of Deteriorated Curtain Wall System

The Motorola Parts Building in Motorola’s Schaumburg, Illinois, campus is a large office/manufacturing facility built in the 1960s. The office wing of the building is a 2-story steel frame building with an aluminum/glass curtain wall system on 3 sides. The curtain wall system consists of insulated vision glass and spandrel panels.

The curtain wall system suffered from many problems including water and air leakage. An investigation of the curtain wall system performed by BTC revealed numerous problems including shrunk and deteriorated gaskets, shifted glass and spandrel panels due to lack of isolation blocks, and cracked spandrel and glass panes.

Another issue with the curtain wall system was ongoing breakage of the spandrel panels along the grade level where they were damaged by airborne debris from lawnmowers. However, the replacement of such panels, and other glass panes with broken seals were difficult and costly because all glass and spandrel panels were originally set from the inside, and were subsequently covered with mechanical equipment and finishes.

The Owner had considered a complete replacement of all system gaskets, necessitating extensive interior work and moving of building occupants. However, BTC developed a unique retrofit system that enabled the future replacement of glass and spandrel panes, and provided for the proper replacement of the dry gasket system with wet sealant. The repairs were successfully implemented at a fraction of the cost for replacement of the gaskets.