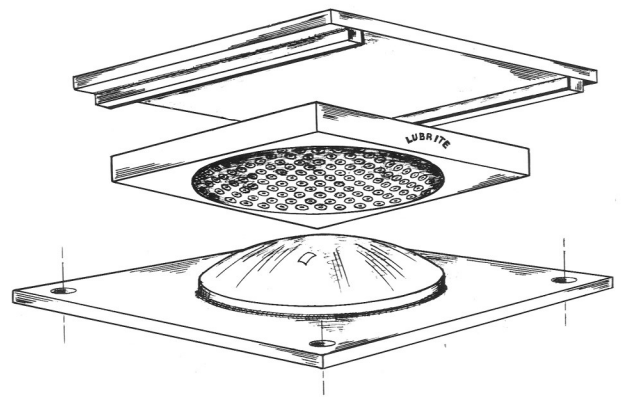




# LUBRITE®

**At Copley Place, Lubrite® Bearings help support the largest building complex in Boston's history.**



Copley Place is a \$460 million mixed use development containing two hotels, two office towers, extensive retail facilities and a 600 car parking garage. Building this complex over transportation corridors of the Massachusetts Turnpike and an adjacent railroad facility presented the architect and contractor with a number of challenges.

A key consideration was transfer of vertical loads above underlying transportation corridors. Sixty four plate girders were used to transfer eighty six of the columns, while the balance were transferred by means of trusses. The situation was further complicated by exposure of the lower floor area to external environmental temperatures. This creates a temperature differential between the

upper interior and lower floor areas that can exceed 80°F, creating substantial expansion and contraction movement.

101 Lubrite F® spherical bearings are in service at Copley Place. The spherical bearings were selected because of their ability to simultaneously accommodate deflection and rotation, an extremely important consideration due to problems caused by lateral load transfer and the required construction sequence. In cases where horizontal movement is encountered due to expansion and contraction, the spherical bearings are furnished with lubrication that slides against the sole plates. Capacities of bearings ranged from 500 kips to 3,600 kips.

**LUBRITE® TECHNOLOGIES**  
145 WEBSTER STREET, SUITE J  
HANOVER, MA 02339

TEL: 781-871-1420

FAX: 781-871-1492

E-MAIL: SALES@LUBRITETECHNOLOGIES.COM