

The slabs in 6th and 7th floor had undergone excessive deflection resulted from under design.

- The measured deflection was approximately 160mm;
- Visual cracks were also observed at locations where the deflections were high;
- The client wanted to change use for these levels that resulted in having additional loads than already designed for.

Freyssinet was approached by the Contractor to carry-out design, supply, and execution of strengthening works.

Freyssinet had made all the design/structural assessments and proposed a solution for strengthening considering all the restraints (i.e., clear height, MEP and architectural requirements, etc.).

Freyssinet introduced a pre-stressed beam that changed the behavior of the slab through which the deflection datum has changed and the slab could now take the new desired load as per the new use.

Repairs

Deck lifting and Elastomeric Bearings Replacement
Nesma Headquarters Offices
Building 2
Jeddah, KSA



Client

NESMA

Consultant

Nawaf Attar Architectural

Contractor

International Bldg System Co.

Construction

March 2011