

Client requested Freyssinet to realize material and structural diagnosis for the PT and RC members damaged by fire. This diagnosis will lead to propose of repair solutions.

Freyssinet conducted the diagnosis through two methodologies

1. On site Methodologies
 - Study of the construction drawings,
 - Disorder mapping,
 - Re-bounce hammer,
 - Re-bar position (using Hilti Ferroskan)
 - Position of the pre-stressing cables by georadar
2. Laboratory Methodology
 - Macroscopic observations on cores,
 - Petrographic study: microscopic observations on thin sections,
 - X-Ray diffraction analysis and scanning electron microscope observations for temperature estimation at the pre-stressing level
 - Tensile test on rebars
 - Concrete elasticity modulus

Freyssinet Gulf LLC, PO Box 36211, Dubai, UAE

Tel: +971 4 2094 900 - Fax: +971 4 2094 910

fme@freyssinet.sofr.me www.freyssinet-me.com

Repairs

STRUCTURAL DIAGNOSIS AND ASSESSMENT WORKS FOR STRUCTURAL ELEMENTS AFTER FIRE INCIDENT

Bloom Center Development
Abu Dhabi - UAE



Client

Bloom Center

Consultant

Burohappold/ Heberger

Contractor

Shapoorji and Palonji

Construction

45 days