

Client requested Freyssinet to realize a full damage mapping of the building and structural diagnosis for:

- Concrete and steel reinforcement of slabs and walls
- Post-tensioning system of slabs
- Steel structure

The target was to assess the structural damages and define the repairs.

Freyssinet conducted the diagnosis through:

1. On site work

- Damage mapping,
- Re-bounce hammer testing,
- Ultra-sonic pulse velocity testing,
- Concrete and steel sampling,
- Residual Stress testing on PT cables (Crossbow test)

2. Laboratory work

- Ultra-sonic measurement on cores,
- Microscopic observation on thin sections,
- X-Ray diffraction analysis and scanning electron microscope observations for temperature estimation at the PT level
- Tensile test on rebars
- Strength, hardness and metallographic examination of structural steel

Freyssinet Gulf LLC, PO Box 36211, Dubai, UAE

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

[fme@freyssinet.sofr.me](mailto:fme@freyssinet.sofr.me) [www.freyssinet-me.com](http://www.freyssinet-me.com)

## Repairs

### Structural assessment work after fire

The Address Downtown, Dubai



#### Client

Emaar

#### Consultant

WSP / AECOM

#### Contractor

DBB

#### Execution

January - April 2016