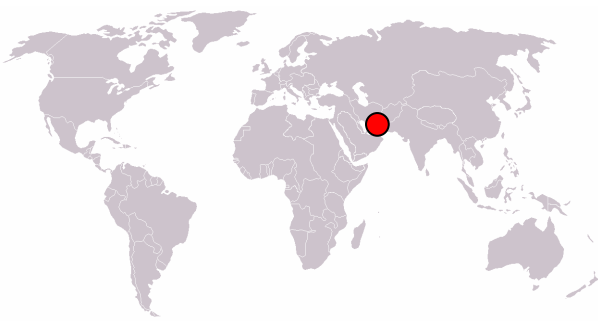


# SIGNATURE TOWERS



**Location**

Dubai, UAE

**Building type:**

New mixed use buildings including office, residential and retail

79 level office, the hotel

65 levels residential

47 levels residential and hotel tower

**Features**

- 70+ storey complex
- LEED-CS Gold (target)
- Sustainable design strategies

**The project**

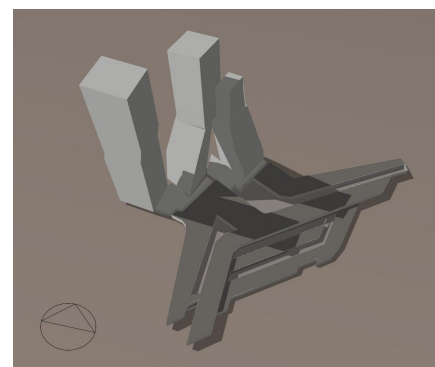
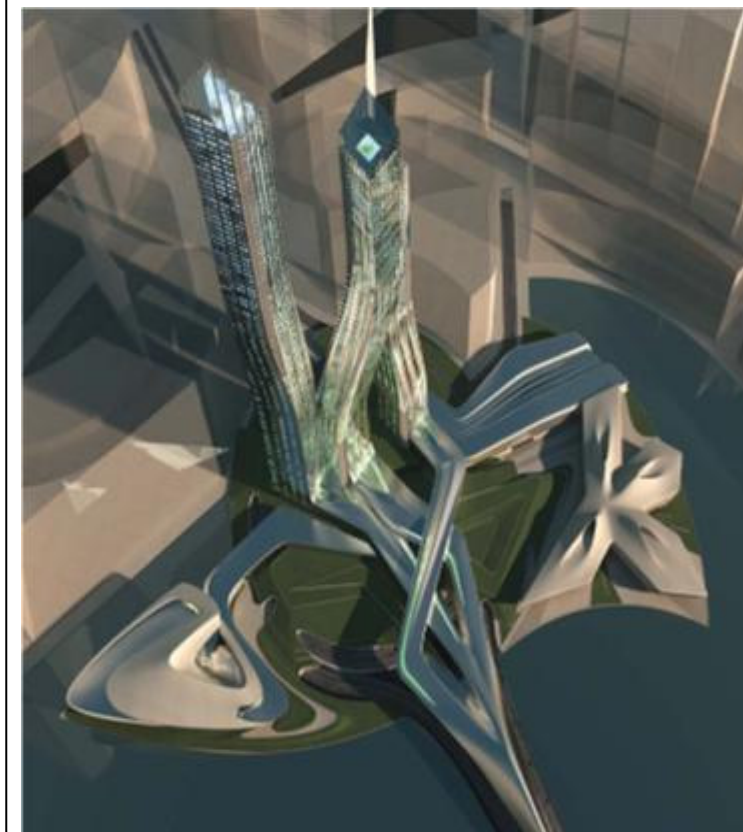
There are 3 high rise towers that form part of the Signature complex – an office tower, a residential tower and a hotel tower.

MSBG's LEED Accredited Professionals investigated sustainable design aspects including

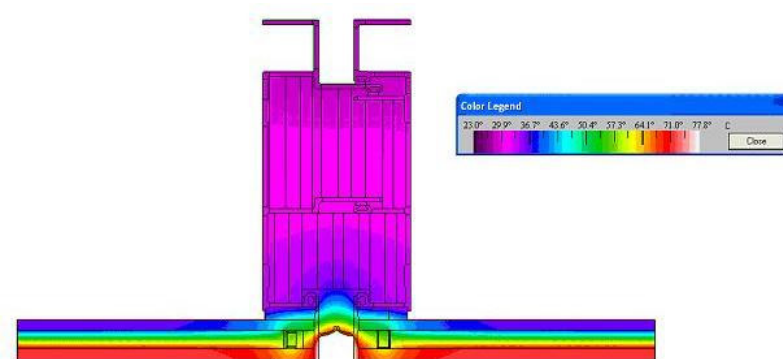
- Solar boosted domestic hot water
- High performance facade
- Daylight and glare control strategies
- Building Integrated Photovoltaic

Renewable energy options for consideration in this project include:

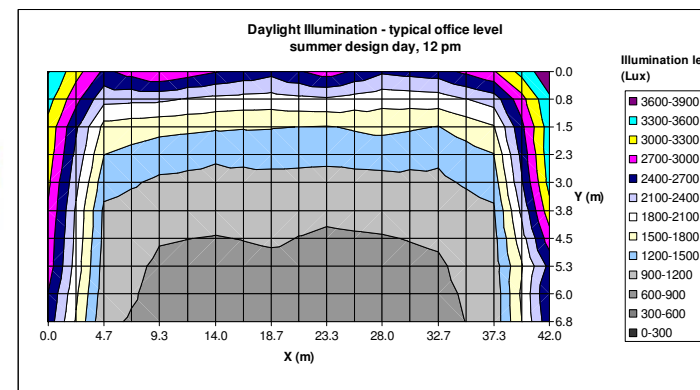
- Solar Technology;
- Wind Power; and
- Thermal Energy Storage (TES)
- Aquifer heat rejection systems



Facade thermal analysis



External and internal shading analysis



Daylight analysis

**Towards a LEED Gold (target)**

The Meinhardt Building Science Group (MBSG) undertook:

- Energy modelling to assist in the design and show compliance with the LEED requirements.
- Daylight modelling
- Shading analysis
- Glare analysis
- Initial scoping analysis of LEED credit requirements
- Preparing ESD strategies for schematic and concept design
- Thermal and energy modelling to assist in the design of the facade

