Hor-Al-Anz, Dubai, U.A.E

## **Building Type**

Mosque

## **Project Highlights**

- Condensing units with centrifugal fans
- Jet diffusers for discrete air distribution
- 28°C year round ablution water
- Economizer for "free cooling" when ambient conditions permit
- Water saving ablution faucets.
- Timer controlled with sensor over-ride lighting control for external & internal lighting



Badri & Bensouda / Majid Al Futtaim



Client's strict requirements of "no noise disturbance for neighbors" and "no equipment to be located on roof" required an innovative design using split units with centrifugal condenser fans located in the basement. Condenser air discharge through grilles integrated into the façade architecture (in picture above). The unique interior design required supply via jet diffusers.

Mario Associates provided the engineering, design and supervision of construction of all MEP systems including the special features incorporated including:

- No visible mechanical or electrical equipment, external to building structure
- Year round 28°C supply of water for ablution using water saving, self closing ablution taps.
- Economizer system to provide 100% outdoor air for cooling at Fajr time or when external ambient allow.
- Pre-cooling of space to handle peak Friday prayer loads use of thermal fly wheel effect.
- Timer with sensor over ride lighting control system
- Wireless system for Friday sermons transmission over sound system.

Mario Associates is proud to be a part of the iconic mosques design and construction and considers many of the above features unique and requiring intensive study to incorporate and integrate solutions interactively with other disciplines to ensure the aesthetics retained with Client's requirements met fully.

