

Airwoods DX Coil AHU For Dubai Restaurant

Location: Dubai

Product: DX Coil Air Handling Unit

Application: Air Handling Unit for Hospitality, Restaurant

Year: October, 2020

Representative: Wayne Luo

Description:

Client runs a 150 square meters restaurant in Dubai, divides into dinning area, bar area and hookah area. At the pandemic era, people care about building air quality more than ever, at both indoor and outdoor circumstances.

At Dubai, hot season is long and burning, even inside of building or house. The air is dry, making people feel uncomfortable. Client tried with a couple of cassette type air conditioners, the temperature in some areas can somehow be maintained at 23°C to 27°C. But due to the lack of fresh air and insufficient ventilation and air purification, temperature inside of the room may fluctuate, and smell of smoke may cross contaminate.

Solution:

Dubai is a place where water is rare resource, as a result we both agree on the HVAC solution should be DX type, which uses eco-refrigeration R410A, R407C for cooling and heating.

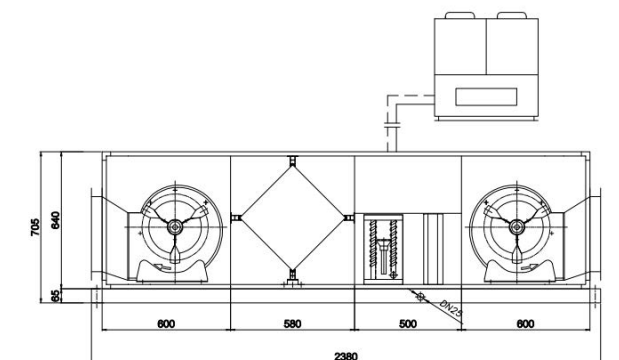
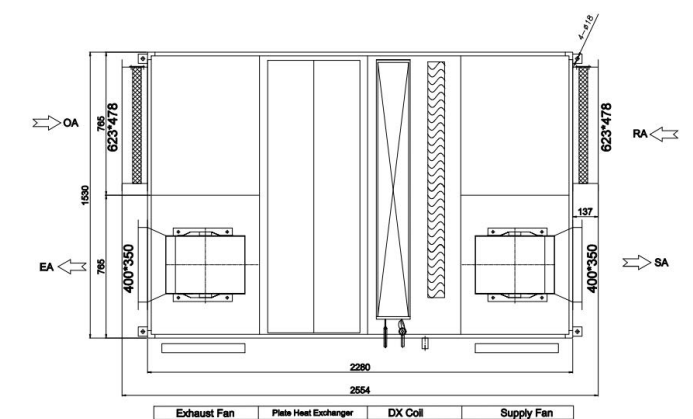
The HVAC system is able to send in 5100 m³/h of fresh air from outside, and distributes to each area in the restaurant by air diffusers on the false ceiling. In the meantime, another 5300 m³/h airflow will return into the HVAC through the air grille on the wall, enter into the recuperator for heat exchange. A recuperator could effectively save a great amount from the AC and reduce the running cost of the AC.

Of course, the air will be cleaned firstly by 2 filters, make sure 99.99% particulates are not going to be sent into the restaurant. People could enjoy their time in the restaurant with their families and friends, without being worried about air quality.

The restaurant is covered by the clean and cool air. And guest feel free to enjoy comfortable building air quality, and enjoy gourmet food!



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AHU Design Structure