

# Air System Sizing Summary for AHU-E1

Project Name: AHU E1  
Prepared by: No Name

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12:31PM

## Air System Information

Air System Name ..... **AHU-E103**  
Equipment Class ..... **CW AHU**  
Air System Type ..... **CAV/RH**

Number of zones ..... **19**  
Floor Area ..... **551.0** m<sup>2</sup>  
Location ..... **Ho Chi Minh City, Vietnam**

## Sizing Calculation Information

### Zone and Space Sizing Method:

Zone L/s ..... **Sum of space airflow rates**  
Space L/s ..... **Individual peak space loads**

Calculation Months ..... **Jan to Dec**  
Sizing Data ..... **User-Modified**

## Central Cooling Coil Sizing Data

Total coil load ..... **240.3** kW  
Sensible coil load ..... **160.1** kW  
Coil L/s at Jul 1500 ..... **10595** L/s  
Max block L/s ..... **10595** L/s  
Sum of peak zone L/s ..... **10595** L/s  
Sensible heat ratio ..... **0.666**  
m<sup>2</sup>/kW ..... **2.3**  
W/m<sup>2</sup> ..... **436.1**  
Water flow @ 5.0 °K rise ..... **11.50** L/s

Load occurs at ..... **Jul 1500**  
OA DB / WB ..... **35.0 / 25.0** °C  
Entering DB / WB ..... **24.1 / 18.1** °C  
Leaving DB / WB ..... **11.5 / 11.1** °C  
Coil ADP ..... **10.2** °C  
Bypass Factor ..... **0.100**  
Resulting RH ..... **57** %  
Design supply temp. .... **12.0** °C  
Zone T-stat Check ..... **19 of 19** OK  
Max zone temperature deviation ..... **0.0** °K

## Central Heating Coil Sizing Data

Max coil load ..... **59.3** kW  
Coil L/s at Des Htg ..... **10595** L/s  
Max coil L/s ..... **10595** L/s  
Water flow @ 5.0 °K drop ..... **N/A**

Load occurs at ..... **Des Htg**  
W/m<sup>2</sup> ..... **107.7**  
Ent. DB / Lvg DB ..... **7.4 / 12.0** °C

## Supply Fan Sizing Data

Actual max L/s ..... **10595** L/s  
Standard L/s ..... **10571** L/s  
Actual max L/(s-m<sup>2</sup>) ..... **19.23** L/(s-m<sup>2</sup>)

Fan motor BHP ..... **0.00** BHP  
Fan motor kW ..... **0.00** kW  
Fan static ..... **0** Pa

## Outdoor Ventilation Air Data

Design airflow L/s ..... **2022** L/s  
L/(s-m<sup>2</sup>) ..... **3.67** L/(s-m<sup>2</sup>)

L/s/person ..... **23.78** L/s/person