

Air System Sizing Summary for AHU-1

Project Name: Untitled
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Air System Information

Air System Name	AHU-1	Number of zones	1
Equipment Class	SPLT AHU	Floor Area	2875.0 ft ²
Air System Type	SZCAV	Location	New Orleans IAP, Louisiana

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	Sum of space airflow rates	Calculation Months	Jan to Dec
Space CFM	Individual peak space loads	Sizing Data	Calculated

Central Cooling Coil Sizing Data

Total coil load	9.6 Tons	Load occurs at	Jun 1600
Total coil load	114.8 MBH	OA DB / WB	91.5 / 78.9 °F
Sensible coil load	102.4 MBH	Entering DB / WB	77.8 / 66.3 °F
Coil CFM at Jun 1600	5587 CFM	Leaving DB / WB	60.8 / 59.7 °F
Max block CFM	5587 CFM	Coil ADP	59.0 °F
Sum of peak zone CFM	5587 CFM	Bypass Factor	0.100
Sensible heat ratio	0.893	Resulting RH	54 %
ft ² /Ton	300.6	Design supply temp.	58.0 °F
BTU/(hr-ft ²)	39.9	Zone T-stat Check	1 of 1 OK
Water flow @ 10.0 °F rise	N/A	Max zone temperature deviation	0.0 °F

Central Heating Coil Sizing Data

Max coil load	46.4 MBH	Load occurs at	Des Htg
Coil CFM at Des Htg	5587 CFM	BTU/(hr-ft ²)	16.1
Max coil CFM	5587 CFM	Ent. DB / Lvg DB	67.8 / 75.5 °F
Water flow @ 20.0 °F drop	N/A		

Supply Fan Sizing Data

Actual max CFM	5587 CFM	Fan motor BHP	0.00 BHP
Standard CFM	5581 CFM	Fan motor kW	0.00 kW
Actual max CFM/ft ²	1.94 CFM/ft ²	Fan static	0.00 in wg

Outdoor Ventilation Air Data

Design airflow CFM	248 CFM	CFM/person	16.50 CFM/person
CFM/ft ²	0.09 CFM/ft ²		