

Project Title: Sample Project

Project ID: 30206

Project Manger: W.M

Prepared By: W.T

Sheet: 1 of 1

Checked By: D.W.

Date: 2/4/18

100% OUTSIDE AIR UNIT COOLING & HEATING COILS SIZING
USING HUMIDITY RATIO

Project Description

NYC Area

Cooling Coil Load Estimate			Remarks
Outside Air Temperature Dry Bulb	92.1	F	0.4% Condition
Outside Air Temperature Wet Bulb	74.4	F	
Outside Air Humidity Ratio =	0.0142	lb _w /lb _a	Auto Calculated
Cooling Coil Leaving Air Temperature Dry Bulb	55.0	F	
Cooling Coil Leaving Air Temperature Wet Bulb	53.0	F	
Cooling Coil Leaving Air Humidity Ratio =	0.0081	lb _w /lb _a	Auto Calculated
Unit Airflow	22,000	CFM	
Sensible Load =	881,496	Btu/hr	Btu/hr = 1.08 x CFM x ΔTdb
Latent Load =	653,976	Btu/hr	Btu/hr = 4840 x CFM x ΔHumidity Ratio
Total Cooling Load =	1,535,472	Btu/hr	
Total Cooling Load =	128	Tons	

Heating Coil Load Estimate			Remarks
Outside Air Temperature Dry Bulb	11.0	F	99.6% Condition
Heating Coil Leaving Air Temperature Dry Bulb	95.0	F	
Unit Airflow	5,000	CFM	
Total Btu/hr =	453,600	Btu/hr	Btu/hr = 1.08 x CFM x ΔTdb
Total Heating Load =	454	MBH	

Notes:

Enter Your Notes Here.