

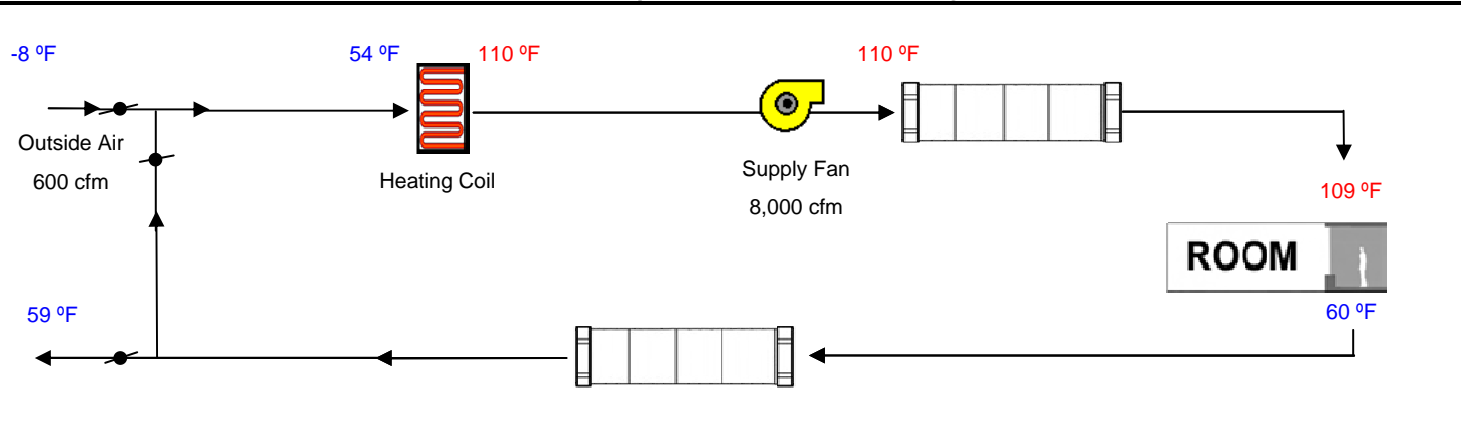
HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name		Date	9/21/2012
System Name	(2) 10 Ton Heat Pumps	Floor Area	4,000

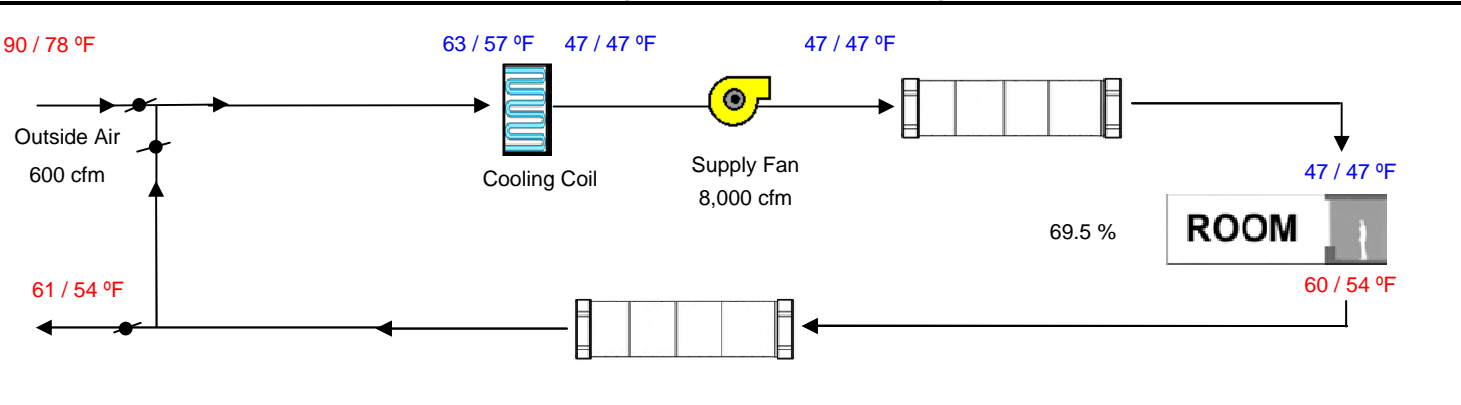
ENGINEERING CHECKS		SYSTEM LOAD					
Number of Systems	2	Total Room Loads Return Vented Lighting Return Air Ducts Return Fan Ventilation Supply Fan Supply Air Ducts TOTAL SYSTEM LOAD	COIL COOLING PEAK			COIL HTG. PEAK	
Heating System			CFM	Sensible	Latent	CFM	Sensible
Output per System	110,800		7,716	102,768	36,626	2,129	110,264
Total Output (Btuh)	221,600			0			
Output (Btuh/sqft)	55.4			5,138			5,513
Cooling System				0			0
Output per System	119,400		600	18,696	28,973	600	42,388
Total Output (Btuh)	238,800			0			0
Total Output (Tons)	19.9			5,138			5,513
Total Output (Btuh/sqft)	59.7						
Total Output (sqft/Ton)	201.0						
			131,741	65,599		163,678	

Air System		HVAC EQUIPMENT SELECTION				
CFM per System	4,000	Carrier 50HJQ0012-5/6	135,522	73,945		40,586
Airflow (cfm)	8,000					
Airflow (cfm/sqft)	2.00					
Airflow (cfm/Ton)	402.0					
Outside Air (%)	7.5 %	Total Adjusted System Output (Adjusted for Peak Design conditions)	135,522	73,945		40,586
Outside Air (cfm/sqft)	0.15					
Note: values above given at ARI conditions		TIME OF SYSTEM PEAK		Jul 2 PM	Jan 1 AM	

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



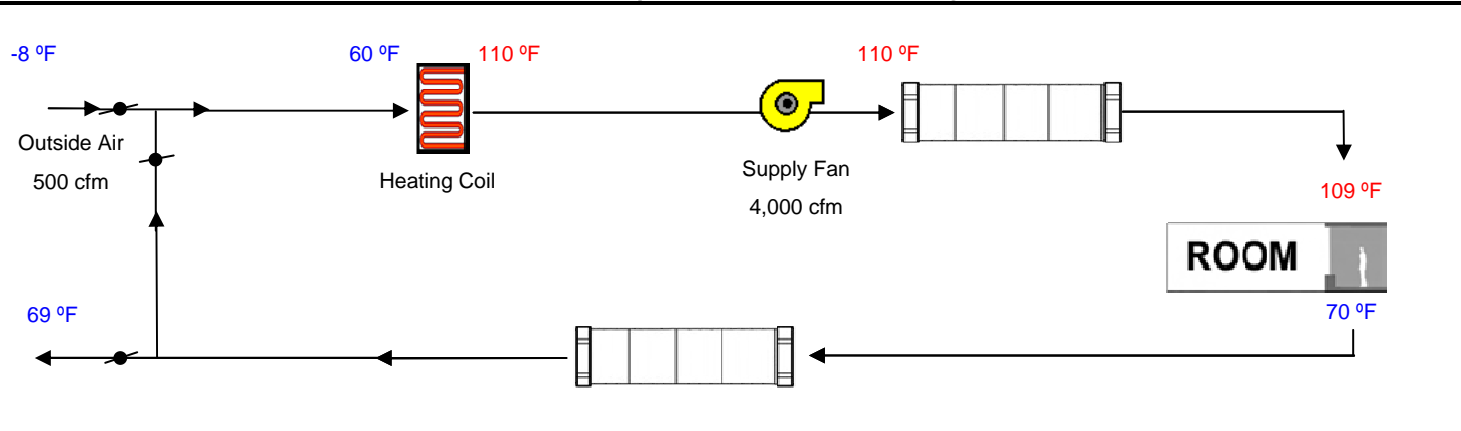
HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name		Date	9/21/2012
System Name	(1) 10 Ton Heat Pump	Floor Area	2,000

ENGINEERING CHECKS		SYSTEM LOAD					
Number of Systems	1	Total Room Loads Return Vented Lighting Return Air Ducts Return Fan Ventilation Supply Fan Supply Air Ducts TOTAL SYSTEM LOAD	COIL COOLING PEAK			COIL HTG. PEAK	
Heating System			CFM	Sensible	Latent	CFM	Sensible
Output per System	110,800		3,719	58,083	19,500	1,535	63,242
Total Output (Btuh)	110,800			0			
Output (Btuh/sqft)	55.4			2,904			3,162
Cooling System				0			0
Output per System	119,400		500	8,486	15,633	500	40,521
Total Output (Btuh)	119,400			0			0
Total Output (Tons)	10.0			2,904			3,162
Total Output (Btuh/sqft)	59.7						
Total Output (sqft/Ton)	201.0						
			72,377	35,133		110,087	

Air System		HVAC EQUIPMENT SELECTION				
CFM per System	4,000	Carrier 50HJQ0012-5/6	76,771	45,822		20,293
Airflow (cfm)	4,000					
Airflow (cfm/sqft)	2.00					
Airflow (cfm/Ton)	402.0					
Outside Air (%)	12.5 %	Total Adjusted System Output (Adjusted for Peak Design conditions)	76,771	45,822		20,293
Outside Air (cfm/sqft)	0.25					
Note: values above given at ARI conditions		TIME OF SYSTEM PEAK	Jul 3 PM			Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)

