Project Name: Example Problem Prepared by: Carrier Corporation

D101 - Classroom	D	DESIGN COOLING			DESIGN HEATING		
COOLING DATA AT Jun 1600				HEATING DATA AT DES HTG			
	COOLING OA D	B / WB 88.0 °F	/ 72.0 °F	HEATING OA DB / WB -6.0 °F / -7.2 °F			
	OCCUPIED T-STAT 74.0 °F			OCCUPIED T-STAT 72.0 °F			
		Sensible	Latent		Sensible	Latent	
ZONE LOADS	Details	(BTU/hr)	(BTU/hr)	Details	(BTU/hr)	(BTU/hr)	
Window & Skylight Solar Loads	72 ft²	3237	-	72 ft²	-	-	
Wall Transmission	203 ft <sup>2</sup>	287	-	203 ft <sup>2</sup>	1332	-	
Roof Transmission	908 ft <sup>2</sup>	1042	-	908 ft²	3946	-	
Window Transmission	72 ft²	490	-	72 ft²	3645	-	
Skylight Transmission	0 ft²	0	-	0 ft²	0	-	
Door Loads	0 ft²	0	-	0 ft²	0	-	
Floor Transmission	908 ft²	0	-	908 ft²	1459	-	
Partitions	0 ft²	0	-	0 ft²	0	-	
Ceiling	0 ft²	0	-	0 ft²	0	-	
Overhead Lighting	2940 W	5800	-	0	0	-	
Task Lighting	0 W	0	-	0	0	-	
Electric Equipment	0 W	0	-	0	0	-	
People	25	4471	3000	0	0	0	
Infiltration	-	0	0	-	0	0	
Miscellaneous	-	0	0	-	0	0	
Safety Factor	10% / 10%	1533	300	20%	2076	0	
>> Total Zone Loads	-	16860	3300	-	12458	0	

D102 - Classroom	DESIGN COOLING			DESIGN HEATING			
				HEATING DATA AT DES HTG			
				HEATING OA DB / WB -6.0 °F / -7.2 °F			
	OCCUPIED T-S1	ΓΑΤ 74.0 °F		OCCUPIED T-STAT 72.0 °F			
		Sensible	Latent		Sensible	Latent	
ZONE LOADS	Details	(BTU/hr)	(BTU/hr)	Details	(BTU/hr)	(BTU/hr)	
Window & Skylight Solar Loads	72 ft²	3237	-	72 ft²	-	-	
Wall Transmission	203 ft <sup>2</sup>	287	-	203 ft <sup>2</sup>	1332	-	
Roof Transmission	908 ft²	1042	-	908 ft²	3946	-	
Window Transmission	72 ft²	490	-	72 ft²	3645	-	
Skylight Transmission	0 ft²	0	-	0 ft²	0	-	
Door Loads	0 ft²	0	-	0 ft²	0	-	
Floor Transmission	908 ft <sup>2</sup>	0	-	908 ft²	1459	-	
Partitions	0 ft²	0	-	0 ft²	0	-	
Ceiling	0 ft²	0	-	0 ft²	0	-	
Overhead Lighting	2940 W	5800	-	0	0	-	
Task Lighting	0 W	0	-	0	0	-	
Electric Equipment	0 W	0	-	0	0	-	
People	25	4471	3000	0	0	0	
Infiltration	-	0	0	-	0	0	
Miscellaneous	-	0	0	-	0	0	
Safety Factor	10% / 10%	1533	300	20%	2076	0	
>> Total Zone Loads	-	16860	3300	-	12458	0	

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## Zone Design Load Summary for Packaged Rooftop AHU

Project Name: Example Problem Prepared by: Carrier Corporation

08/27/2002 03:22PM

D103 - Classroom	D	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA	COOLING DATA AT Jun 1600 COOLING OA DB / WB 88.0 °F / 72.0 °F			HEATING DATA AT DES HTG HEATING OA DB / WB -6.0 °F / -7.2 °F		
	COOLING OA D						
	OCCUPIED T-STAT 74.0 °F			OCCUPIED T-STAT 72.0 °F			
		Sensible	Latent		Sensible	Latent	
ZONE LOADS	Details	(BTU/hr)	(BTU/hr)	Details	(BTU/hr)	(BTU/hr)	
Window & Skylight Solar Loads	72 ft²	3237	ı	72 ft²	ı	ı	
Wall Transmission	203 ft <sup>2</sup>	287	-	203 ft <sup>2</sup>	1332	1	
Roof Transmission	908 ft²	1042	-	908 ft <sup>2</sup>	3946	-	
Window Transmission	72 ft²	490	-	72 ft²	3645	-	
Skylight Transmission	0 ft²	0	-	0 ft²	0	-	
Door Loads	0 ft²	0	-	0 ft²	0	-	
Floor Transmission	908 ft <sup>2</sup>	0	-	908 ft²	1459	-	
Partitions	0 ft²	0	-	0 ft²	0	-	
Ceiling	0 ft²	0	-	0 ft²	0	-	
Overhead Lighting	2940 W	5800	-	0	0	-	
Task Lighting	0 W	0	-	0	0	-	
Electric Equipment	0 W	0	-	0	0	-	
People	25	4471	3000	0	0	0	
Infiltration	-	0	0	-	0	0	
Miscellaneous	-	0	0	-	0	0	
Safety Factor	10% / 10%	1533	300	20%	2076	0	
>> Total Zone Loads	-	16860	3300	-	12458	0	

D104 - Classroom	D	DESIGN COOLING COOLING DATA AT Aug 1600 COOLING OA DB / WB 91.0 °F / 74.0 °F			DESIGN HEATING HEATING DATA AT DES HTG HEATING OA DB / WB -6.0 °F / -7.2 °F		
	COOLING DATA						
	COOLING OA D						
	OCCUPIED T-S	TAT 74.0 °F		OCCUPIED T-STAT 72.0 °F			
		Sensible	Latent		Sensible	Latent	
ZONE LOADS	Details	(BTU/hr)	(BTU/hr)	Details	(BTU/hr)	(BTU/hr)	
Window & Skylight Solar Loads	72 ft²	3033	-	72 ft²	-	-	
Wall Transmission	533 ft²	725	-	533 ft²	3498	1	
Roof Transmission	908 ft²	973	-	908 ft²	3946	1	
Window Transmission	72 ft²	630	-	72 ft²	3645	-	
Skylight Transmission	0 ft²	0	-	0 ft²	0	1	
Door Loads	0 ft²	0	-	0 ft²	0	ı	
Floor Transmission	908 ft²	0	-	908 ft²	2357	1	
Partitions	0 ft²	0	-	0 ft²	0	ı	
Ceiling	0 ft²	0	-	0 ft²	0	ı	
Overhead Lighting	2940 W	5800	-	0	0	-	
Task Lighting	0 W	0	-	0	0	ı	
Electric Equipment	0 W	0	-	0	0	ı	
People	25	4471	3000	0	0	0	
Infiltration	-	0	0	-	0	0	
Miscellaneous	-	0	0	-	0	0	
Safety Factor	10% / 10%	1563	300	20%	2689	0	
>> Total Zone Loads	-	17196	3300	-	16135	0	

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## **NOTE**

## The remaining pages of this report

have been left off so as to improve access times.