

STANDARD LOAD OUTPUTS

10-01-21

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Company Name:
Block Load v1.0

Zone Name: CULVERS DINING

City Name : TAMPA *, FLORIDA Weight - Wall: 30
 Latitude (deg): 28 (lb/sqft) Roof: 40
 Elevation (ft): 35 Bldg: 30
 Indoor -Summer: 74 F 50 RH Color - Wall: LIGHT
 -Winter: 75 F Roof: LIGHT

	TEMP	TOTAL TONS	RSH TONS	CFM
1. JAN at 8 A.M.	67.2	6.84	4.32	2,483
2. FEB at 9 A.M.	71.2	7.75	4.73	2,717
3. APR at 10 A.M.	78.6	9.29	5.04	2,896
4. MAY at 2 P.M.	91.0	11.45	6.19	3,557
5. JUN at 5 P.M.	92.0	12.84	6.96	3,997
6. AUG at 5 P.M.	93.0	12.94	7.06	4,051
7. NOV at 11 A.M.	77.6	9.49	5.44	3,123
Heating Load (Btuh)=	36,797	w/Infil.=	36,797	Airflow= 956 cfm

ORIENTATION OF BUILDING N S E W RF
 TRANSMISSION FACTORS 0.20 0.20 0.20 0.20 0.05
 Glass Fac.:1.13 Lights Fluorescent? Y Shade Fac.:0.65 Floors: 1
 Length: 59 Width: 45 Height: 10 Vent Air Percent: 24

Number of people =	133	Sensible people load =	32,524
Total lights =	3,717	Lighting load =	15,858
Other electrical =	1,328	Other electrical =	4,531
Area of N glass =	64	North glass solar =	509
Area of S glass =	78	South glass solar =	507
Area of E glass =	0	East glass solar =	0
Area of W glass =	114	West glass solar =	11,679
Total glass area =	256	Total glass solar =	12,695
		Total glass trans. =	5,496
Area of N wall =	526	N wall load =	2,104
Area of S wall =	512	S wall load =	2,422
Area of E wall =	450	E wall load =	1,862
Area of W wall =	336	W wall load =	2,450
Total wall area =	1,824	Total wall trans. =	8,839
Area of roof =	2,655	Roof load =	4,730
Safety factor =	0%	Safety load =	0
Supply fan hp =	0.58	Fan heat gain (DT) =	1,778
Ventilation cfm =	743	Vent sensible load =	15,537
		Vent latent load =	26,117
		People latent load =	27,214
Total cfm-std air=	4,051	Total latent load =	53,331

Room sensible = 84,675 Room latent = 27,214
 Plenum return exhaust credit = 0
 --> GRAND TOTAL LOAD = 155,321 Btu/hr or 12.94 tons <--
 Load run for # 6. AUG at 5 P.M.

Area (sq ft) = 2,655 Sq ft/ton = 205
 Total cfm-std air= 4,051 Cfm/sq ft = 1.53

HEATING LOAD

Ventilation load = 32,710 Roof heating load = 5,310
 Glass heat load = 11,571 Wall heating load = 14,592



MDCI FLORIDA, INC.

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 Safety Harbor, Florida 34695

LOAD BASED ON ASHRAE
 COOLING AND HEATING
 LOAD CALCULATION MANUAL.

STANDARD LOAD OUTPUTS

Company Name:
Block Load v1.0

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Zone Name: CULVERS KITCHEN

City Name : TAMPA *, FLORIDA Weight - Wall: 30
Latitude (deg): 28 (lb/sqft) Roof: 40
Elevation (ft): 35 Bldg: 30
Indoor -Summer: 74 F 50 RH Color - Wall: LIGHT
-Winter: 75 F Roof: LIGHT

	TEMP	TOTAL TONS	RSH TONS	CFM
1. JAN at 8 A.M.	67.2	8.25	6.88	3,951
2. FEB at 9 A.M.	71.2	8.88	7.04	4,041
3. APR at 10 A.M.	78.6	10.44	7.32	4,202
4. MAY at 2 P.M.	91.0	11.88	7.80	4,479
5. JUN at 5 P.M.	92.0	12.77	8.09	4,643
6. AUG at 5 P.M.	93.0	12.81	8.13	4,668
7. NOV at 11 A.M.	77.6	10.17	7.32	4,202
Heating Load (Btuh)=	20,958	w/Infil.=	20,958	Airflow= 544 cfm

ORIENTATION OF BUILDING N S E W RF
TRANSMISSION FACTORS 0.16 0.16 0.16 0.16 0.05
Glass Fac.:0.45 Lights Fluorescent? Y Shade Fac.:0.47 Floors: 1
Length: 45 Width: 48 Height: 10 Vent Air Percent: 19

Number of people =	18	Sensible people load =	5,040
Total lights =	3,456	Lighting load =	14,744
Other electrical =	19,440	Other electrical =	66,349
Area of N glass =	0	North glass solar =	0
Area of S glass =	0	South glass solar =	0
Area of E glass =	0	East glass solar =	0
Area of W glass =	0	West glass solar =	0
Total glass area =	0	Total glass solar =	0
		Total glass trans. =	0
Area of N wall =	450	N wall load =	1,440
Area of S wall =	450	S wall load =	1,703
Area of E wall =	480	E wall load =	1,589
Area of W wall =	480	W wall load =	2,800
Total wall area =	1,860	Total wall trans. =	7,533
Area of roof =	2,160	Roof load =	3,848
Safety factor =	0%	Safety load =	0
Supply fan hp =	0.67	Fan heat gain (DT) =	2,049
Ventilation cfm =	799	Vent sensible load =	16,703
		Vent latent load =	32,598
		People latent load =	4,860
Total cfm-std air=	4,668	Total latent load =	37,458

Room sensible = 97,553 Room latent = 4,860
Plenum return exhaust credit = 0
--> GRAND TOTAL LOAD = 153,763 Btu/hr or 12.81 tons <--
Load run for # 6. AUG at 5 P.M.

Area (sq ft) = 2,160 Sq ft/ton = 169
Total cfm-std air= 4,668 Cfm/sq ft = 2.16

HEATING LOAD

Ventilation load = 35,165 Roof heating load = 4,320
Glass heat load = 0 Wall heating load = 11,904



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