HVAC LOAD CALCULATIONS

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1500	40.79	47.60	6) June/1600	39.65	46.73
2) Aug/1500	40.60	47.41	7) July/1400	39.99	46.73
3) June/1500	40.03	47.18	8) Aug/1400	39.79	46.54
4) July/1600	40.41	47.14	9) June/1400	39.23	46.31
5) Aug/1600	40.22	46.95	10) July/1700	39.36	45.81

TABLE 6. ZONE SIZING DATA

Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC CONFERNCE	17,933	1,478	@July 1700	6,728	-

SYSTEM SIZING SUMMARY

System Name : DSC CONFERENCE 19-02-00
Location : MAI'N, Jordan Block Load v2.00
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Zone Name: DSC CONFERNCE

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 47,596 W	Load occurs	@ July 1500
Sensible coil load	= 40,793 W	Outdoor Db/Wb	= 40.0/ 21.1 C
Total zone sensible	= 17,819 W	Coil Conditions:	
Supply temperature	= 17.8 C	Entering Db/Wb	= 29.6/ 17.6 C
Supply air (actual)	= 3,111 L/s	Leaving Db/Wb	= 17.7/ 12.4 C
Supply air (std)	= 2,839 L/s	Apparatus dewpoint	= 6.7 C
Ventilation air	= 1,088 L/s	Bypass factor	= 0.480
Direct exhaust air	= 0 L/s	Resulting zone RH	= 42.6 %
Reheat required	= 0 W		

Floor area (sqm)	= 132	Total coil load	= 47.60 kW
Overall U-value	= 0.944	Sensible coil load	= 40.79 kW
Vent air L/s/sqm	= 8.26	SQM/kW	= 2.77
nt air L/s/person	= 8.00	Cooling W/sqm	= 361.26
		Cooling L/s/sqm	= 23.61

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 19,910 W	Heating W/sqm	= 151.12
Ventilation load	= 13,181 W	Heating L/s/sqm	= 23.61
Total zone load	= 6,728 W	Floor area (sqm)	= 132
Ventilation airflow	= 1,088 L/s	Overall U-value	= 0.944
Supply airflow	= 3,111 L/s	Vent air L/s/sqm	= 8.26
		Vent air L/s/person	= 8.00

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
Data Source	= User Modified	Daily Range	= 14.0 K
itude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 12 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 21.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 17.8 C	Coil Bypass	: 0.480
Ventilation	: 1,088 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 %	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: Y
Configuration	: Draw-Thru	% Roof Load	: 70
Static Pressure	: 50.00 Pa.	% Lighting Load	: 30
		% Wall Load	: 52

DETAILED SYSTEM LOAD REPORT

System Name : DSC CONFERENCE 19-02-00
Location : MAI'N, Jordan Block Load v2.00
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Zone Name: DSC CONFERNCE

TABLE 1. LOAD COMPONENT SUMMARY for July 1500 (40.0/ 21.1 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	11 sqm	1,088	-	-
Wall Transmission	119 sqm	658	-	1,051
Roof Transmission	132 sqm	464	-	841
Glass Transmission	11 sqm	1,090	-	834
Skylight Transmission	0 sqm	0	-	0
Partitions	55 sqm	912	-	1,829
Lighting	37.20 W/sqm	3,254	-	-
Other Electric	11.39 W/sqm	1,327	-	-
People	136 people	6,702	4,783	-
Filtration		1,370	112	1,774
Miscellaneous		0	0	-
Slab	132 sqm	-	-	-212
Pulldown/Warm-up		106	-	-
Safety Factor	5/ 5/ 10 %	849	245	612
Total Zone Loads		17,819	5,140	6,728
Ventilation Load	1,088 L/s	19,127	1,664	13,181
Supply Fan Load	3,111 L/s	288	-	-
Plenum Load Thru Wall	52 %	713	-	-
Plenum Load Thru Roof	70 %	1,082	-	-
Plenum Load - Lights	30 %	1,764	-	-
Total Coil Loads		40,793	6,803	19,910

TABLE 2. WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	0	0	-	0
	E	31	232	-	274
	SE	0	0	-	0
	S	29	142	-	252
	SW	0	0	-	0
	W	29	146	-	252
	NW	0	0	-	0
	N	31	138	-	274
Glass	: NE	0	0	0	0
	E	6	545	748	417
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	0	0	0	0
	N	6	545	340	417

DETAILED ZONE LOAD REPORT

System Name : DSC CONFERENCE 19-02-00

Location : MAI'N, Jordan Block Load v2.00

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TABLE 1. GENERAL INFORMATION

Zone Name : DSC CONFERNCE
System Name : DSC CONFERENCE

Design load @ July 1700
Db/Wb temp. : 38.6/ 20.7 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	11 sqm	1,048	-
Wall Transmission	119 sqm	736	1,051
Roof Transmission	132 sqm	500	841
Glass Transmission	11 sqm	1,033	834
Skylight Transmission	0 sqm	0	0
Partitions	55 sqm	912	1,829
Lighting	37.20 W/sqm	3,318	-
Other Electric	11.39 W/sqm	1,340	-
People	136 people	6,886	-
Infiltration		1,258	1,774
Miscellaneous		0	-
Slab	132 sqm	-	-212
Pulldown/Warm-up		49	-
Safety Factor	5/ 10 %	854	612
Total Zone Loads		17,933	6,728

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	0	0	-	0
	E	31	232	-	274
	SE	0	0	-	0
	S	29	164	-	252
	SW	0	0	-	0
	W	29	186	-	252
	NW	0	0	-	0
	N	31	154	-	274
Glass	NE	0	0	0	0
	E	6	516	690	417
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	0	0	0	0
	N	6	516	358	417

SYSTEM SIZING SUMMARY

System Name : DSC RES CASH & CLOAK 28-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

****

Zone Name: DSC RES. CASH

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 1,174 W	Load occurs @	Aug 1600
Sensible coil load	= 1,091 W	Outdoor Db/Wb	= 39.6/ 21.0 C
Total zone sensible	= 907 W	Coil Conditions:	
Supply temperature	= 15.8 C	Entering Db/Wb	= 24.5/ 15.7 C
Supply air (actual)	= 114 L/s	Leaving Db/Wb	= 15.8/ 12.1 C
Supply air (std)	= 104 L/s	Apparatus dewpoint	= 8.9 C
Ventilation air	= 10 L/s	Bypass factor	= 0.440
Direct exhaust air	= 0 L/s	Resulting zone RH	= 43.1 %
Reheat required	= 0 W		

Floor area (sqm)	= 7	Total coil load	= 1.17 kW
Overall U-value	= 0.715	Sensible coil load	= 1.09 kW
Vent air L/s/sqm	= 1.43	SQM/kW	= 5.96
Vent air L/s/person	= 10.00	Cooling W/sqm	= 167.68
		Cooling L/s/sqm	= 16.29

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 507 W	Heating W/sqm	= 72.44
Ventilation load	= 88 W	Heating L/s/sqm	= 16.29
Total zone load	= 419 W	Floor area (sqm)	= 7
Ventilation airflow	= 10 L/s	Overall U-value	= 0.715
Supply airflow	= 114 L/s	Vent air L/s/sqm	= 1.43
		Vent air L/s/person	= 10.00

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
Data Source	= User Modified	Daily Range	= 14.0 K
Latitude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 14 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 18.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 15.8 C	Coil Bypass	: 0.440
Ventilation	: 10 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: N
Configuration	: Draw-Thru		
Static Pressure	: 10.00 Pa.		

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TABLE 5. TOP TEN COOLING COIL LOADS

	Time	Sensible kW	Total kW		Time	Sensible kW	Total kW
1)	Aug/1600	1.09	1.17	6)	July/1700	1.07	1.15
2)	Aug/1500	1.09	1.17	7)	Sept/1600	1.08	1.15
3)	Aug/1700	1.09	1.17	8)	June/1600	1.06	1.15
4)	July/1600	1.08	1.16	9)	Aug/1400	1.07	1.15
5)	July/1500	1.08	1.16	10)	June/1500	1.06	1.15

TABLE 6. ZONE SIZING DATA

e Name	Maximum Cooling Sensible (W)	Design Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC RES. CASH	911	54 @ Aug 1700		419	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC RES CASH & CLOAK 28-02-00
Location : MAI'N, Jordan Block Load v2.00
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Zone Name: DSC RES. CASH

TABLE 1. LOAD COMPONENT SUMMARY for Aug 1600 (39.6/ 21.0 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Latent (W)	Design Heating (W)
Solar Loads	0 sqm	0	-	-
Wall Transmission	11 sqm	161	-	71
Roof Transmission	7 sqm	81	-	32
Glass Transmission	0 sqm	0	-	0
Skylight Transmission	0 sqm	0	-	0
Partitions	12 sqm	161	-	226
Lighting	21.40 W/sqm	148	-	-
Other Electric	28.57 W/sqm	181	-	-
People	1 people	56	60	-
filtration		71	5	69
Miscellaneous		0	0	-
Slab	7 sqm	-	-	-17
Pulldown/Warm-up		5	-	-
Safety Factor	5/ 5/ 10 %	43	3	38
Total Zone Loads		907	69	419
Ventilation Load	10 L/s	182	14	88
Supply Fan Load	114 L/s	2	-	-
Plenum Load Thru Wall	0 %	0	-	-
Plenum Load Thru Roof	0 %	0	-	-
Plenum Load - Lights	0 %	0	-	-
Total Coil Loads		1,091	82	507

TABLE 2. WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	0	0	-	0
E	0	0	-	0
SE	6	96	-	40
S	5	66	-	32
SW	0	0	-	0
W	0	0	-	0
NW	0	0	-	0
N	0	0	-	0
Glass : NE	0	0	0	0
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	0	0	0	0
N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC RES CASH & CLOAK 28-02-00
Location : MAI'N, Jordan Block Load v2.00
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TABLE 1. GENERAL INFORMATION

Zone Name : DSC RES. CASH
System Name : DSC RES CASH & CLOAK

Design load @ Aug 1700
Db/Wb temp. : 38.6/ 20.7 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	0 sqm	0	-
Wall Transmission	11 sqm	166	71
Roof Transmission	7 sqm	84	32
Glass Transmission	0 sqm	0	0
Skylight Transmission	0 sqm	0	0
Partitions	12 sqm	161	226
Lighting	21.40 W/sqm	150	-
Other Electric	28.57 W/sqm	182	-
People	1 people	56	-
Infiltration		67	69
Miscellaneous		0	-
Slab	7 sqm	-	-17
Pulldown/Warm-up		4	-
Safety Factor	5/ 10 %	43	38
Total Zone Loads		911	419

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	0	0	-	0
E	0	0	-	0
SE	6	96	-	40
S	5	70	-	32
SW	0	0	-	0
W	0	0	-	0
NW	0	0	-	0
N	0	0	-	0
Glass : NE	0	0	0	0
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	0	0	0	0
N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC RESTURANT 26-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : ENGINEERS Page 1 of 2

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Zone Name: DSC RESTURANT

2 X 195
6800 c fm

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 90,906 W	Load occurs	@ July 1600
Sensible coil load	= 80,164 W	Outdoor Db/Wb	= 39.6/ 21.0 C
Total zone sensible	= 51,022 W	Coil Conditions:	
Supply temperature	= 15.8 C	Entering Db/Wb	= 26.9/ 16.2 C
Supply air (actual)	= 6,416 L/s	Leaving Db/Wb	= 15.6/ 11.3 C
Supply air (std)	= 5,854 L/s	Apparatus dewpoint	= 6.7 C
Ventilation air	= 1,520 L/s	Bypass factor	= 0.440
Direct exhaust air	= 288 L/s	Resulting zone RH	= 39.5 %
Reheat required	= 0 W		

Floor area (sqm)	= 243	Total coil load	= 90.91 kW
Overall U-value	= 1.730	Sensible coil load	= 80.16 kW
Vent air L/s/sqm	= 6.27	SQM/kW	= 2.67
nt air L/s/person	= 10.00	Cooling W/sqm	= 374.72
		Cooling L/s/sqm	= 26.45

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 27,703 W	Heating W/sqm	= 114.19
Ventilation load	= 13,393 W	Heating L/s/sqm	= 26.45
Total zone load	= 14,310 W	Floor area (sqm)	= 243
Ventilation airflow	= 1,520 L/s	Overall U-value	= 1.730
Supply airflow	= 6,416 L/s	Vent air L/s/sqm	= 6.27
		Vent air L/s/person	= 10.00

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
Data Source	= User Modified	Daily Range	= 14.0 K
itude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type : Clg & Warm Air Htg
System Start : 800
Duration : 14 hrs

SIZING SPECIFICATIONS
Supply : 15.8 C
Ventilation : 1,520 L/s
Exhaust : 288 L/s

FAN
Configuration : Draw-Thru
Static Pressure : 120.00 Pa.

THERMOSTAT SETPOINTS
Cooling (Occ) : 23.0 C
Cooling (Unocc) : 28.0 C
Heating : 18.0 C

FACTORS
Coil Bypass : 0.440
Safety (Sens) : 5 %
Safety (Latent) : 5 %
Heating Safety : 10 %
RETURN AIR PLENUM : N

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1600	80.16	90.91	6) Aug/1700	79.04	89.51
2) Aug/1600	80.11	90.85	7) Aug/1500	78.54	89.40
3) July/1700	79.69	90.14	8) June/1700	77.94	89.08
4) July/1500	79.12	89.95	9) June/1500	77.47	88.99
5) June/1600	78.35	89.78	10) July/1400	76.84	87.70

TABLE 6. ZONE SIZING DATA

ne Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC RESTURANT	52,100	3,092	@July 1700	14,310	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC RESTURANT 26-02-00
Location : MAI'N. Jordan Block Load v2.00
Prepared By : . / ENGINEERS Page 1 of 1

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Zone Name: DSC RESTURANT

TABLE 1. LOAD COMPONENT SUMMARY for July 1600 (39.6/ 21.0 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Latent (W)	Design Heating (W)
Solar Loads	124 sqm	13,109	-	-
Wall Transmission	365 sqm	4,342	-	2,336
Roof Transmission	243 sqm	2,967	-	1,126
Glass Transmission	124 sqm	11,822	-	6,668
Skylight Transmission	0 sqm	0	-	0
Partitions	60 sqm	785	-	1,101
Lighting	17.72 W/sqm	4,257	-	-
Other Electric	3.30 W/sqm	723	-	-
People	152 people	7,951	5,346	-
Infiltration		2,457	416	2,375
Miscellaneous		0	0	-
Slab	243 sqm	-	-	-597
Pulldown/Warm-up		181	-	-
Safety Factor	5/ 5/ 10 %	2,430	288	1,301
Total Zone Loads		51,022	6,050	14,310
Ventilation Load	1,520 L/s	27,716	4,692	13,393
Supply Fan Load	6,416 L/s	1,426	-	-
Plenum Load Thru Wall	0 %	0	-	-
Plenum Load Thru Roof	0 %	0	-	-
Plenum Load - Lights	0 %	0	-	-
Total Coil Loads		80,164	10,742	27,703

TABLE 2. WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	19	251	-	120
	E	38	583	-	240
	SE	29	421	-	189
	S	81	913	-	518
	SW	19	222	-	120
	W	80	951	-	512
	NW	30	315	-	189
	N	70	686	-	448
Glass	: NE	10	950	1,002	536
	E	0	0	0	0
	SE	20	1,882	2,086	1,061
	S	32	3,079	1,761	1,737
	SW	10	950	1,554	536
	W	32	3,079	3,692	1,737
	NW	20	1,882	3,014	1,061
	N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC RESTURANT 26-02-00
Location : MAI'N, Jordan Block Load v2.00
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TABLE 1. GENERAL INFORMATION

Zone Name : DSC RESTURANT
System Name : DSC RESTURANT

Design load @ July 1700
Db/Wb temp. : 38.6/ 20.7 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	124 sqm	14,279	-
Wall Transmission	365 sqm	4,637	2,336
Roof Transmission	243 sqm	3,067	1,126
Glass Transmission	124 sqm	11,349	6,668
Skylight Transmission	0 sqm	0	0
Partitions	60 sqm	785	1,101
Lighting	17.72 W/sqm	4,291	-
Other Electric	3.30 W/sqm	726	-
People	152 people	8,037	-
Infiltration		2,317	2,375
Miscellaneous		0	-
Slab	243 sqm	-	-597
Pulldown/Warm-up		130	-
Safety Factor	5/ 10 %	2,481	1,301
Total Zone Loads		52,100	14,310

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	19	254	-	120
	E	38	582	-	240
	SE	29	425	-	189
	S	81	969	-	518
	SW	19	250	-	120
	W	80	1,085	-	512
	NW	30	351	-	189
	N	70	723	-	448
Glass	: NE	10	912	955	536
	E	0	0	0	0
	SE	20	1,806	1,989	1,061
	S	32	2,956	1,651	1,737
	SW	10	912	1,492	536
	W	32	2,956	4,951	1,737
	NW	20	1,806	3,241	1,061
	N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC EXHIBITION 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

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Zone Name: DSC EXHIBITION

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 97,839 W	Load occurs	@ July 1600
Sensible coil load	= 85,459 W	Outdoor Db/Wb	= 39.6/ 21.0 C
Total zone sensible	= 63,512 W	Coil Conditions:	
Supply temperature	= 14.5 C	Entering Db/Wb	= 25.7/ 15.8 C
Supply air (actual)	= 6,800 L/s	Leaving Db/Wb	= 14.3/ 10.7 C
Supply air (std)	= 6,204 L/s	Apparatus dewpoint	= 6.7 C
Ventilation air	= 1,100 L/s	Bypass factor	= 0.400
Direct exhaust air	= 0 L/s	Resulting zone RH	= 40.2 %
Reheat required	= 0 W		

Floor area (sqm)	= 708	Total coil load	= 97.84 kW
Overall U-value	= 1.001	Sensible coil load	= 85.46 kW
Vent air L/s/sqm	= 1.55	SQM/kW	= 7.23
nt air L/s/person	= 8.46	Cooling W/sqm	= 138.28
		Cooling L/s/sqm	= 9.61

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 41,259 W	Heating W/sqm	= 58.31
Ventilation load	= 13,327 W	Heating L/s/sqm	= 9.61
Total zone load	= 27,933 W	Floor area (sqm)	= 708
Ventilation airflow	= 1,100 L/s	Overall U-value	= 1.001
Supply airflow	= 6,800 L/s	Vent air L/s/sqm	= 1.55
		Vent air L/s/person	= 8.46

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
Data Source	= User Modified	Daily Range	= 14.0 K
Latitude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 12 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 21.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 14.5 C	Coil Bypass	: 0.400
Ventilation	: 1,100 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 %	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: N
Configuration	: Draw-Thru		
Static Pressure	: 150.00 Pa.		

2 X 230
7200 cfm
each

****

TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1600	85.46	97.84	6) July/1700	84.46	96.71
2) Aug/1600	85.20	97.58	7) June/1500	83.48	96.50
3) July/1500	85.01	97.36	8) Aug/1700	83.95	96.19
4) Aug/1500	84.87	97.22	9) June/1700	83.03	95.95
5) June/1600	83.97	97.02	10) July/1400	82.65	95.00

TABLE 6. ZONE SIZING DATA

ne Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Design Heating Load (W)	Flow Rate (L/s)
DSC EXHIBITION	63,651	3,216	@July 1700	27,933	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC EXHIBITION 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

****

Zone Name: DSC EXHIBITION

TABLE 1. LOAD COMPONENT SUMMARY for July 1600 (39.6/ 21.0 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	72 sqm	8,903	-	-
Wall Transmission	561 sqm	6,932	-	4,940
Roof Transmission	708 sqm	8,654	-	4,514
Glass Transmission	72 sqm	6,856	-	5,317
Skylight Transmission	0 sqm	0	-	0
Partitions	97 sqm	1,115	-	2,236
Lighting	20.00 W/sqm	13,555	-	-
Other Electric	0.00 W/sqm	0	-	-
People	130 people	6,920	7,810	-
Infiltration		7,167	1,086	9,525
Miscellaneous		0	0	-
Slab	708 sqm	-	-	-1,138
Pulldown/Warm-up		386	-	-
Safety Factor	5/ 5/ 10 %	3,024	445	2,539
Total Zone Loads		63,512	9,341	27,933
Ventilation Load	1,100 L/s	20,058	3,039	13,327
Supply Fan Load	6,800 L/s	1,889	-	-
Plenum Load Thru Wall	0 %	0	-	-
Plenum Load Thru Roof	0 %	0	-	-
Plenum Load - Lights	0 %	0	-	-
Total Coil Loads		85,459	12,380	41,259

TABLE 2. WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	61	810	-	533
	E	33	505	-	286
	SE	124	1,766	-	1,087
	S	33	366	-	286
	SW	124	1,460	-	1,088
	W	33	386	-	286
	NW	124	1,320	-	1,087
	N	33	318	-	286
Glass	: NE	6	584	616	453
	E	8	753	1,011	584
	SE	6	584	648	453
	S	16	1,506	1,040	1,168
	SW	6	584	956	453
	W	16	1,506	3,223	1,168
	NW	6	584	936	453
	N	8	753	473	584

DETAILED ZONE LOAD REPORT

System Name : DSC EXHIBITION 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

****

TABLE 1. GENERAL INFORMATION

Zone Name : DSC EXHIBITION
System Name : DSC EXHIBITION

Design load @ July 1700
Db/Wb temp. : 38.6/ 20.7 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	72 sqm	8,878	-
Wall Transmission	561 sqm	7,382	4,940
Roof Transmission	708 sqm	8,945	4,514
Glass Transmission	72 sqm	6,582	5,317
Skylight Transmission	0 sqm	0	0
Partitions	97 sqm	1,115	2,236
Lighting	20.00 W/sqm	13,685	-
Other Electric	0.00 W/sqm	0	-
People	130 people	7,011	-
Infiltration		6,758	9,525
Miscellaneous		0	-
Slab	708 sqm	-	-1,138
Pulldown/Warm-up		263	-
Safety Factor	5/ 10 %	3,031	2,539
Total Zone Loads		63,651	27,933

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	61	819	-	533
	E	33	504	-	286
	SE	124	1,781	-	1,087
	S	33	389	-	286
	SW	124	1,642	-	1,088
	W	33	441	-	286
	NW	124	1,470	-	1,087
	N	33	336	-	286
Glass	NE	6	561	587	453
	E	8	723	965	584
	SE	6	561	618	453
	S	16	1,446	980	1,168
	SW	6	561	918	453
	W	16	1,446	3,301	1,168
	NW	6	561	1,007	453
	N	8	723	502	584

SYSTEM SIZING SUMMARY

System Name : DSC CORRIDOR 19-02-00 D.1 GF
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

****

Zone Name: DSC CORRIDOR

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 25,084 W	Load occurs	@ July 1600
Sensible coil load	= 24,875 W	Outdoor Db/Wb	= 39.6/ 21.0 C
Total zone sensible	= 22,598 W	Coil Conditions:	
Supply temperature	= 16.0 C	Entering Db/Wb	= 23.7/ 15.0 C
Supply air (actual)	= 2,931 L/s	Leaving Db/Wb	= 16.0/ 12.0 C
Supply air (std)	= 2,674 L/s	Apparatus dewpoint	= 8.9 C
Ventilation air	= 0 L/s	Bypass factor	= 0.480
Direct exhaust air	= 0 L/s	Resulting zone RH	= 40.8 %
Reheat required	= 0 W		

Floor area (sqm)	= 143	Total coil load	= 25.08 kW
Overall U-value	= 2.128	Sensible coil load	= 24.88 kW
Vent air L/s/sqm	= 0.00	SQM/kW	= 5.72
nt air L/s/person	= 0.00	Cooling W/sqm	= 174.92
		Cooling L/s/sqm	= 20.44

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 12,679 W	Heating W/sqm	= 88.42
Ventilation load	= 0 W	Heating L/s/sqm	= 20.44
Total zone load	= 12,679 W	Floor area (sqm)	= 143
Ventilation airflow	= 0 L/s	Overall U-value	= 2.128
Supply airflow	= 2,931 L/s	Vent air L/s/sqm	= 0.00
		Vent air L/s/person	= 0.00

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
Data Source	= User Modified	Daily Range	= 14.0 K
itude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
evation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 12 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 21.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 16.0 C	Coil Bypass	: 0.480
Ventilation	: 0 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 %	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: Y
Configuration	: Draw-Thru	% Roof Load	: 70
Static Pressure	: 10.00 Pa.	% Lighting Load	: 30
		% Wall Load	: 30

****

TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1600	24.88	25.08	6) July/1700	24.36	24.57
2) Aug/1600	24.68	24.89	7) June/1500	24.16	24.41
3) July/1500	24.68	24.88	8) Aug/1700	24.05	24.26
4) Aug/1500	24.50	24.70	9) June/1700	23.88	24.14
5) June/1600	24.37	24.62	10) July/1400	23.76	23.96

TABLE 6. ZONE SIZING DATA

e Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Design Heating Load (W)	Flow Rate (L/s)
DSC CORRIDOR	22,598	1,383	@July 1600	12,679	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC CORRIDOR 19-02-00
Location : MAI'N. Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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Zone Name: DSC CORRIDOR

TABLE 1. LOAD COMPONENT SUMMARY for July 1600 (39.6/ 21.0 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Latent (W)	Design Heating (W)
Solar Loads	237 sqm	6,494	-	-
Wall Transmission	39 sqm	348	-	345
Roof Transmission	143 sqm	526	-	915
Glass Transmission	237 sqm	11,046	-	8,567
Skylight Transmission	0 sqm	0	-	0
Partitions	0 sqm	0	-	0
Lighting	16.40 W/sqm	1,577	-	-
Other Electric	0.00 W/sqm	0	-	-
People	0 people	0	0	-
Infiltration		1,453	199	1,930
Miscellaneous		0	0	-
Slab	143 sqm	-	-	-231
Pulldown/Warm-up		78	-	-
Safety Factor	5/ 5/ 10 %	1,076	10	1,153
Total Zone Loads		22,598	209	12,679
Ventilation Load	0 L/s	0	0	0
Supply Fan Load	2,931 L/s	54	-	-
Plenum Load Thru Wall	30 %	149	-	-
Plenum Load Thru Roof	70 %	1,228	-	-
Plenum Load - Lights	30 %	847	-	-
Total Coil Loads		24,875	209	12,679

TABLE 2. WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	8	76	-	72
	E	0	0	-	0
	SE	16	156	-	137
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	16	116	-	136
	N	0	0	-	0
Glass	: NE	52	2,463	1,156	1,910
	E	0	0	0	0
	SE	66	3,058	1,447	2,372
	S	0	0	0	0
	SW	52	2,463	1,793	1,910
	W	0	0	0	0
	NW	66	3,062	2,097	2,375
	N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC CORRIDOR 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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TABLE 1. GENERAL INFORMATION

Zone Name : DSC CORRIDOR
System Name : DSC CORRIDOR

Design load @ July 1600
Db/Wb temp. : 39.6/ 21.0 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	237 sqm	6,494	-
Wall Transmission	39 sqm	348	345
Roof Transmission	143 sqm	526	915
Glass Transmission	237 sqm	11,046	8,567
Skylight Transmission	0 sqm	0	0
Partitions	0 sqm	0	0
Lighting	16.40 W/sqm	1,577	-
Other Electric	0.00 W/sqm	0	-
People	0 people	0	-
Infiltration		1,453	1,930
Miscellaneous		0	-
Slab	143 sqm	-	-231
Pulldown/Warm-up		78	-
Safety Factor	5/ 10 %	1,076	1,153
Total Zone Loads		22,598	12,679

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	8	76	-	72
	E	0	0	-	0
	SE	16	156	-	137
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	16	116	-	136
	N	0	0	-	0
Glass	: NE	52	2,463	1,156	1,910
	E	0	0	0	0
	SE	66	3,058	1,447	2,372
	S	0	0	0	0
	SW	52	2,463	1,793	1,910
	W	0	0	0	0
	NW	66	3,062	2,097	2,375
	N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC BAS. OFFICE 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

****

Zone Name: DSC BAS OFFICE

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 2,615 W	Load occurs	@ July 1500
Sensible coil load	= 2,421 W	Outdoor Db/Wb	= 40.0/ 21.1 C
Total zone sensible	= 1,848 W	Coil Conditions:	
Supply temperature	= 15.0 C	Entering Db/Wb	= 25.4/ 15.5 C
Supply air (actual)	= 210 L/s	Leaving Db/Wb	= 14.9/ 11.1 C
Supply air (std)	= 191 L/s	Apparatus dewpoint	= 7.4 C
Ventilation air	= 30 L/s	Bypass factor	= 0.420
Direct exhaust air	= 0 L/s	Resulting zone RH	= 38.9 %
Reheat required	= 0 W		

Floor area (sqm)	= 10	Total coil load	= 2.62 kW
Overall U-value	= 1.203	Sensible coil load	= 2.42 kW
Vent air L/s/sqm	= 3.00	SQM/kW	= 3.82
nt air L/s/person	= 15.00	Cooling W/sqm	= 261.51
		Cooling L/s/sqm	= 20.97

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 1,701 W	Heating W/sqm	= 170.14
Ventilation load	= 363 W	Heating L/s/sqm	= 20.97
Total zone load	= 1,338 W	Floor area (sqm)	= 10
Ventilation airflow	= 30 L/s	Overall U-value	= 1.203
Supply airflow	= 210 L/s	Vent air L/s/sqm	= 3.00
		Vent air L/s/person	= 15.00

model 15

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
Data Source	= User Modified	Daily Range	= 14.0 K
itude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 14 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 21.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 15.0 C	Coil Bypass	: 0.420
Ventilation	: 30 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: N
Configuration	: Draw-Thru		
Static Pressure	: 30.00 Pa.		

****

TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1500	2.42	2.62	6) June/1400	2.38	2.59
2) June/1500	2.40	2.61	7) Aug/1500	2.40	2.59
3) July/1600	2.41	2.60	8) Aug/1600	2.38	2.58
4) June/1600	2.39	2.60	9) Aug/1400	2.37	2.57
5) July/1400	2.40	2.59	10) July/1700	2.37	2.56

TABLE 6. ZONE SIZING DATA

..ie Name	Maximum Cooling Sensible (W)	Design Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC BAS OFFICE	1,848	99	@July 1500	1,338	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC BAS. OFFICE 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

****

Zone Name: DSC BAS OFFICE

TABLE 1. LOAD COMPONENT SUMMARY for July 1500 (40.0/ 21.1 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	1 sqm	68	-	-
Wall Transmission	9 sqm	119	-	79
Roof Transmission	0 sqm	0	-	0
Glass Transmission	1 sqm	64	-	49
Skylight Transmission	0 sqm	0	-	0
Partitions	36 sqm	457	-	916
Lighting	30.00 W/sqm	295	-	-
Other Electric	60.00 W/sqm	540	-	-
People	2 people	103	70	-
Infiltration		104	19	135
Miscellaneous		0	0	-
Slab	10 sqm	-	-	37
Pulldown/Warm-up		10	-	-
Safety Factor	5/ 5/ 10 %	88	4	122
Total Zone Loads		1,848	93	1,338
Ventilation Load	30 L/s	562	100	363
Supply Fan Load	210 L/s	12	-	-
Plenum Load Thru Wall	0 %	0	-	-
Plenum Load Thru Roof	0 %	0	-	-
Plenum Load - Lights	0 %	0	-	-
Total Coil Loads		2,421	194	1,701

TABLE 2. WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	9	119	-	79
	E	0	0	-	0
	SE	0	0	-	0
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	0	0	-	0
	N	0	0	-	0
Glass	NE	1	64	68	49
	E	0	0	0	0
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	0	0	0	0
	N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC BAS. OFFICE 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

****

TABLE 1. GENERAL INFORMATION

Zone Name : DSC BAS OFFICE
System Name : DSC BAS. OFFICE

Design load @ July 1500
Db/Wb temp. : 40.0/ 21.1 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	1 sqm	68	-
Wall Transmission	9 sqm	119	79
Roof Transmission	0 sqm	0	0
Glass Transmission	1 sqm	64	49
Skylight Transmission	0 sqm	0	0
Partitions	36 sqm	457	916
Lighting	30.00 W/sqm	295	-
Other Electric	60.00 W/sqm	540	-
People	2 people	103	-
Infiltration		104	135
Miscellaneous		0	-
Slab	10 sqm	-	37
Pulldown/Warm-up		10	-
Safety Factor	5/ 10 %	88	122
Total Zone Loads		1,848	1,338

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	9	119	-	79
E	0	0	-	0
SE	0	0	-	0
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	0	0	-	0
N	0	0	-	0
Glass : NE	1	64	68	49
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	0	0	0	0
N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC RES. S. KITCHEN 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : ! ENGINEERS Page 1 of 2

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Zone Name: DSC RES. S. KITCHEN

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 22,005 W	Load occurs	@ July 1500
Sensible coil load	= 20,607 W	Outdoor Db/Wb	= 40.0/ 21.1 C
Total zone sensible	= 15,863 W	Coil Conditions:	
Supply temperature	= 18.0 C	Entering Db/Wb	= 30.9/ 18.2 C
Supply air (actual)	= 1,440 L/s	Leaving Db/Wb	= 17.9/ 13.2 C
Supply air (std)	= 1,314 L/s	Apparatus dewpoint	= 9.3 C
Ventilation air	= 300 L/s	Bypass factor	= 0.400
Direct exhaust air	= 300 L/s	Resulting zone RH	= 33.3 %
Reheat required	= 0 W		

Floor area (sqm)	= 44	Total coil load	= 22.00 kW
Overall U-value	= 1.521	Sensible coil load	= 20.61 kW
nt air L/s/sqm	= 6.82	SQM/kW	= 2.00
nt air L/s/person	= 130.84	Cooling W/sqm	= 500.11
		Cooling L/s/sqm	= 32.73

3X model 30

FA = 300 L/sec

EA = 330 L/sec

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 4,262 W	Heating W/sqm	= 96.87
Ventilation load	= 2,643 W	Heating L/s/sqm	= 32.73
Total zone load	= 1,619 W	Floor area (sqm)	= 44
Ventilation airflow	= 300 L/s	Overall U-value	= 1.521
Supply airflow	= 1,440 L/s	Vent air L/s/sqm	= 6.82
		Vent air L/s/person	= 130.84

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
ta Source	= User Modified	Daily Range	= 14.0 K
itude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 28.0 C
Duration	: 14 hrs	Cooling (Unocc)	: 30.0 C
		Heating	: 18.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 18.0 C	Coil Bypass	: 0.400
Ventilation	: 300 L/s	Safety (Sens)	: 5 %
Exhaust	: 330 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: Y
Configuration	: Draw-Thru	% Roof Load	: 70
Static Pressure	: 30.00 Pa.	% Lighting Load	: 30
		% Wall Load	: 22

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1500	20.61	22.00	6) June/1600	20.24	21.78
2) June/1500	20.40	21.94	7) June/1400	20.21	21.74
3) Aug/1500	20.46	21.86	8) Aug/1600	20.28	21.68
4) July/1600	20.43	21.83	9) Aug/1400	20.26	21.66
5) July/1400	20.41	21.81	10) July/1700	20.07	21.42

TABLE 6. ZONE SIZING DATA

one Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC RES. S. KITCHEN	15,863	680	@July 1500	1,619	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC RES. S. KITCHEN 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : . / ENGINEERS Page 1 of 1

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Zone Name: DSC RES. S. KITCHEN

TABLE 1. LOAD COMPONENT SUMMARY for July 1500 (40.0/ 21.1 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	10 sqm	986	-	-
Wall Transmission	16 sqm	132	-	104
Roof Transmission	44 sqm	117	-	204
Glass Transmission	10 sqm	644	-	550
Skylight Transmission	0 sqm	0	-	0
Partitions	16 sqm	-1	-	291
Lighting	24.60 W/sqm	744	-	-
Other Electric	0.00 W/sqm	0	-	-
People	2 people	144	181	-
Infiltration		323	12	431
Miscellaneous		12,000	1,000	-
Slab	44 sqm	-	-	-108
Pulldown/Warm-up		18	-	-
Safety Factor	5/ 5/ 10 %	755	60	147
Total Zone Loads		15,863	1,253	1,619
Ventilation Load	300 L/s	3,965	145	2,643
Supply Fan Load	1,440 L/s	80	-	-
Plenum Load Thru Wall	22 %	37	-	-
Plenum Load Thru Roof	70 %	272	-	-
Plenum Load - Lights	30 %	390	-	-
Total Coil Loads		20,607	1,398	4,262

TABLE 2. WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	8	58	-	52
	E	8	73	-	52
	SE	0	0	-	0
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	0	0	-	0
	N	0	0	-	0
Glass	NE	0	0	0	0
	E	5	322	678	275
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	0	0	0	0
	N	5	322	308	275

DETAILED ZONE LOAD REPORT

System Name : DSC RES. S. KITCHEN 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : ' ' ENGINEERS Page 1 of 1

****

TABLE 1. GENERAL INFORMATION

Zone Name : DSC RES. S. KITCHEN
System Name : DSC RES. S. KITCHEN

Design load @ July 1500
Db/Wb temp. : 40.0/ 21.1 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	10 sqm	986	-
Wall Transmission	16 sqm	132	104
Roof Transmission	44 sqm	117	204
Glass Transmission	10 sqm	644	550
Skylight Transmission	0 sqm	0	0
Partitions	16 sqm	-1	291
Lighting	24.60 W/sqm	744	-
Other Electric	0.00 W/sqm	0	-
People	2 people	144	-
Infiltration		323	431
Miscellaneous		12,000	-
Slab	44 sqm	-	-108
Pulldown/Warm-up		18	-
Safety Factor	5/ 10 %	755	147
Total Zone Loads		15,863	1,619

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	8	58	-	52
	E	8	73	-	52
	SE	0	0	-	0
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	0	0	-	0
	N	0	0	-	0
Glass	NE	0	0	0	0
	E	5	322	678	275
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	0	0	0	0
	N	5	322	308	275

SYSTEM SIZING SUMMARY

System Name : DSC RES. L. KITCHEN 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

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Zone Name: DSC RES. L. KITCHEN

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 37,614 W	Load occurs	@ July 1500
Sensible coil load	= 36,180 W	Outdoor Db/Wb	= 40.0/ 21.1 C
Total zone sensible	= 29,983 W	Coil Conditions:	
Supply temperature	= 18.0 C	Entering Db/Wb	= 30.0/ 17.9 C
Supply air (actual)	= 2,722 L/s	Leaving Db/Wb	= 17.9/ 13.4 C
Supply air (std)	= 2,484 L/s	Apparatus dewpoint	= 9.9 C
Ventilation air	= 385 L/s	Bypass factor	= 0.400
Direct exhaust air	= 385 L/s	Resulting zone RH	= 33.5 %
Reheat required	= 0 W		

Floor area (sqm)	= 58	Total coil load	= 37.61 kW
Overall U-value	= 0.741	Sensible coil load	= 36.18 kW
nt air L/s/sqm	= 6.69	SQM/kW	= 1.53
vent air L/s/person	= 128.33	Cooling W/sqm	= 653.36
		Cooling L/s/sqm	= 47.29

4 X model 30
+1 X model 15

FA = 385 L/sec
EX = 435 L/sec

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 4,604 W	Heating W/sqm	= 79.96
Ventilation load	= 3,392 W	Heating L/s/sqm	= 47.29
Total zone load	= 1,211 W	Floor area (sqm)	= 58
Ventilation airflow	= 385 L/s	Overall U-value	= 0.741
Supply airflow	= 2,722 L/s	Vent air L/s/sqm	= 6.69
		Vent air L/s/person	= 128.33

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
ata Source	= User Modified	Daily Range	= 14.0 K
atitude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 28.0 C
Duration	: 14 hrs	Cooling (Unocc)	: 30.0 C
		Heating	: 18.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 18.0 C	Coil Bypass	: 0.400
Ventilation	: 385 L/s	Safety (Sens)	: 5 %
Exhaust	: 435 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: Y
Configuration	: Draw-Thru	% Roof Load	: 70
Static Pressure	: 30.00 Pa.	% Lighting Load	: 30
		% Wall Load	: 22

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1500	36.18	37.61	6) July/1400	35.92	37.35
2) June/1500	35.93	37.56	7) Aug/1600	35.92	37.35
3) Aug/1500	36.06	37.49	8) June/1400	35.66	37.30
4) July/1600	36.03	37.48	9) Aug/1400	35.80	37.23
5) June/1600	35.78	37.43	10) July/1700	35.66	37.06

TABLE 6. ZONE SIZING DATA

Zone Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC RES. L. KITCHEN	29,999	1,285	@July 1700	1,211	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC RES. L. KITCHEN 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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Zone Name: DSC RES. L. KITCHEN

TABLE 1. LOAD COMPONENT SUMMARY for July 1500 (40.0/ 21.1 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	1 sqm	104	-	-
Wall Transmission	56 sqm	327	-	358
Roof Transmission	58 sqm	153	-	267
Glass Transmission	1 sqm	63	-	54
Skylight Transmission	0 sqm	0	-	0
Partitions	0 sqm	0	-	0
Lighting	24.60 W/sqm	974	-	-
Other Electric	0.00 W/sqm	0	-	-
People	3 people	189	237	-
Infiltration		423	10	564
Miscellaneous		26,300	1,000	-
Slab	58 sqm	-	-	-142
Pulldown/Warm-up		24	-	-
Safety Factor	5/ 5/ 10 %	1,428	62	110
Total Zone Loads		29,983	1,310	1,211
Ventilation Load	385 L/s	5,088	124	3,392
Supply Fan Load	2,722 L/s	151	-	-
Plenum Load Thru Wall	22 %	92	-	-
Plenum Load Thru Roof	70 %	356	-	-
Plenum Load - Lights	30 %	510	-	-
Total Coil Loads		36,180	1,434	4,604

TABLE 2. WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	28	200	-	179
E	0	0	-	0
SE	0	0	-	0
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	28	126	-	179
N	0	0	-	0
Glass : NE	1	63	104	54
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	0	0	0	0
N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC RES. L. KITCHEN 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : [illegible] / ENGINEERS Page 1 of 1

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TABLE 1. GENERAL INFORMATION

Zone Name : DSC RES. L. KITCHEN
System Name : DSC RES. L. KITCHEN

Design load @ July 1700
Db/Wb temp. : 38.6/ 20.7 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	1 sqm	95	-
Wall Transmission	56 sqm	380	358
Roof Transmission	58 sqm	168	267
Glass Transmission	1 sqm	58	54
Skylight Transmission	0 sqm	0	0
Partitions	0 sqm	0	0
Lighting	24.60 W/sqm	990	-
Other Electric	0.00 W/sqm	0	-
People	3 people	193	-
Infiltration		374	564
Miscellaneous		26,300	-
Slab	58 sqm	-	-142
Pulldown/Warm-up		12	-
Safety Factor	5/ 10 %	1,429	110
Total Zone Loads		29,999	1,211

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	28	208	-	179
E	0	0	-	0
SE	0	0	-	0
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	28	172	-	179
N	0	0	-	0
Glass : NE	1	58	95	54
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	0	0	0	0
N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC BAS. GUARD HOUSE 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

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Zone Name: DSC BAS GUARD HOUSE

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 1,434 W	Load occurs	@ June 1500
Sensible coil load	= 1,355 W	Outdoor Db/Wb	= 39.4/ 21.1 C
Total zone sensible	= 1,166 W	Coil Conditions:	
Supply temperature	= 15.0 C	Entering Db/Wb	= 24.2/ 15.2 C
Supply air (actual)	= 132 L/s	Leaving Db/Wb	= 14.9/ 11.4 C
Supply air (std)	= 121 L/s	Apparatus dewpoint	= 8.2 C
Ventilation air	= 10 L/s	Bypass factor	= 0.420
Direct exhaust air	= 0 L/s	Resulting zone RH	= 40.4 %
Reheat required	= 0 W		

Floor area (sqm)	= 7	Total coil load	= 1.43 kW
Overall U-value	= 1.126	Sensible coil load	= 1.35 kW
nt air L/s/sqm	= 1.51	SQM/kW	= 4.62
ent air L/s/person	= 10.77	Cooling W/sqm	= 216.38
		Cooling L/s/sqm	= 19.98

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 1,293 W	Heating W/sqm	= 195.10
Ventilation load	= 121 W	Heating L/s/sqm	= 19.98
Total zone load	= 1,171 W	Floor area (sqm)	= 7
Ventilation airflow	= 10 L/s	Overall U-value	= 1.126
Supply airflow	= 132 L/s	Vent air L/s/sqm	= 1.51
		Vent air L/s/person	= 10.77

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
ta Source	= User Modified	Daily Range	= 14.0 K
titude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

model 15

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 000	Cooling (Occ)	: 23.0 C
Duration	: 24 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 21.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 15.0 C	Coil Bypass	: 0.420
Ventilation	: 10 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: N
Configuration	: Draw-Thru		
Static Pressure	: 30.00 Pa.		

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) June/1500	1.35	1.43	6) July/1400	1.35	1.42
2) July/1500	1.36	1.43	7) June/1700	1.33	1.41
3) June/1600	1.35	1.43	8) July/1700	1.34	1.41
4) July/1600	1.35	1.43	9) Aug/1500	1.32	1.40
5) June/1400	1.34	1.42	10) June/1300	1.32	1.39

TABLE 6. ZONE SIZING DATA

one Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC BAS GUARD HOUSE	1,166	62	@June 1500	1,171	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC BAS. GUARD HOUSE 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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Zone Name: DSC BAS GUARD HOUSE

TABLE 1. LOAD COMPONENT SUMMARY for June 1500 (39.4/ 21.1 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	1 sqm	97	-	-
Wall Transmission	15 sqm	172	-	132
Roof Transmission	0 sqm	0	-	0
Glass Transmission	1 sqm	81	-	65
Skylight Transmission	0 sqm	0	-	0
Partitions	30 sqm	394	-	789
Lighting	30.10 W/sqm	238	-	-
Other Electric	0.00 W/sqm	0	-	-
People	1 people	62	33	-
Infiltration		67	12	89
Miscellaneous		0	0	-
Slab	7 sqm	-	-	-11
Pulldown/Warm-up		0	-	-
Safety Factor	5/ 5/ 10 %	56	2	106
Total Zone Loads		1,166	47	1,171
Ventilation Load	10 L/s	181	32	121
Supply Fan Load	132 L/s	7	-	-
Plenum Load Thru Wall	0 %	0	-	-
Plenum Load Thru Roof	0 %	0	-	-
Plenum Load - Lights	0 %	0	-	-
Total Coil Loads		1,355	79	1,293

TABLE 2. WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	8	107	-	71
E	0	0	-	0
SE	0	0	-	0
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	0	0	-	0
N	7	65	-	62
Glass : NE	1	81	97	65
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	0	0	0	0
N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC BAS. GUARD HOUSE 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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TABLE 1. GENERAL INFORMATION

Zone Name : DSC BAS GUARD HOUSE
System Name : DSC BAS. GUARD HOUSE

Design load @ June 1500
Db/Wb temp. : 39.4/ 21.1 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	1 sqm	97	-
Wall Transmission	15 sqm	172	132
Roof Transmission	0 sqm	0	0
Glass Transmission	1 sqm	81	65
Skylight Transmission	0 sqm	0	0
Partitions	30 sqm	394	789
Lighting	30.10 W/sqm	238	-
Other Electric	0.00 W/sqm	0	-
People	1 people	62	-
Infiltration		67	89
Miscellaneous		0	-
Slab	7 sqm	-	-11
Pulldown/Warm-up		0	-
Safety Factor	5/ 10 %	56	106
Total Zone Loads		1,166	1,171

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	8	107	-	71
	E	0	0	-	0
	SE	0	0	-	0
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	0	0	-	0
	N	7	65	-	62
Glass	NE	1	81	97	65
	E	0	0	0	0
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	0	0	0	0
	N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC BAS. REST AREA 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

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Zone Name: DSC BAS REST AREA

TABLE 1. SIZING DATA -- COOLING

Total coil load =	3,792 W	Load occurs @	June 1500
Sensible coil load =	3,544 W	Outdoor Db/Wb	= 39.4/ 21.1 C
Total zone sensible=	2,982 W	Coil Conditions:	
Supply temperature =	15.0 C	Entering Db/Wb	= 24.5/ 15.3 C
Supply air (actual)=	338 L/s	Leaving Db/Wb	= 14.9/ 11.3 C
Supply air (std) =	309 L/s	Apparatus dewpoint=	8.1 C
Ventilation air =	30 L/s	Bypass factor =	0.420
Direct exhaust air =	0 L/s	Resulting zone RH =	40.4 %
Reheat required =	0 W		

Floor area (sqm) =	21	Total coil load =	3.79 kW
Overall U-value =	1.941	Sensible coil load =	3.54 kW
nt air L/s/sqm =	1.40	SQM/kW =	5.64
vent air L/s/person =	10.00	Cooling W/sqm =	177.19
		Cooling L/s/sqm =	15.81

TABLE 2. SIZING DATA -- HEATING

Heating coil load =	3,337 W	Heating W/sqm =	155.93
Ventilation load =	363 W	Heating L/s/sqm =	15.81
Total zone load =	2,974 W	Floor area (sqm) =	21
Ventilation airflow=	30 L/s	Overall U-value =	1.941
Supply airflow =	338 L/s	Vent air L/s/sqm =	1.40
		Vent air L/s/person =	10.00

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TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
ta Source	= User Modified	Daily Range	= 14.0 K
atitude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 14 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 21.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 15.0 C	Coil Bypass	: 0.420
Ventilation	: 30 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: N
Configuration	: Draw-Thru		
Static Pressure	: 30.00 Pa.		

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) June/1500	3.54	3.79	6) July/1600	3.52	3.74
2) July/1500	3.56	3.78	7) June/1300	3.45	3.70
3) June/1400	3.52	3.77	8) July/1300	3.46	3.69
4) July/1400	3.53	3.76	9) Aug/1500	3.45	3.67
5) June/1600	3.50	3.75	10) June/1700	3.42	3.67

TABLE 6. ZONE SIZING DATA

Zone Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC BAS REST AREA	2,982	160	@June 1500	2,974	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC BAS. REST AREA 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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Zone Name: DSC BAS REST AREA

TABLE 1. LOAD COMPONENT SUMMARY for June 1500 (39.4/ 21.1 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	4 sqm	474	-	-
Wall Transmission	18 sqm	240	-	159
Roof Transmission	0 sqm	0	-	0
Glass Transmission	4 sqm	400	-	318
Skylight Transmission	0 sqm	0	-	0
Partitions	73 sqm	940	-	1,885
Lighting	18.70 W/sqm	393	-	-
Other Electric	0.00 W/sqm	0	-	-
People	3 people	155	106	-
Infiltration		215	38	288
Miscellaneous		0	0	-
Slab	21 sqm	-	-	53
Pulldown/Warm-up		22	-	-
Safety Factor	5/ 5/ 10 %	142	7	270
Total Zone Loads		2,982	151	2,974
Ventilation Load	30 L/s	543	97	363
Supply Fan Load	338 L/s	19	-	-
Plenum Load Thru Wall	0 %	0	-	-
Plenum Load Thru Roof	0 %	0	-	-
Plenum Load - Lights	0 %	0	-	-
Total Coil Loads		3,544	248	3,337

TABLE 2. WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	18	240	-	159
E	0	0	-	0
SE	0	0	-	0
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	0	0	-	0
N	0	0	-	0
Glass : NE	4	400	474	318
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	0	0	0	0
N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC BAS. REST AREA 04-03-00

Location : MAI'N, Jordan Block Load v2.00

Prepared By : / ENGINEERS Page 1 of 1

****

TABLE 1. GENERAL INFORMATION

Zone Name : DSC BAS REST AREA
System Name : DSC BAS. REST AREA

Design load @ June 1500
Db/Wb temp. : 39.4/ 21.1 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	4 sqm	474	-
Vall Transmission	18 sqm	240	159
Roof Transmission	0 sqm	0	0
Glass Transmission	4 sqm	400	318
Skylight Transmission	0 sqm	0	0
Partitions	73 sqm	940	1,885
Lighting	18.70 W/sqm	393	-
Other Electric	0.00 W/sqm	0	-
People	3 people	155	-
Infiltration		215	288
Miscellaneous		0	-
Slab	21 sqm	-	53
Pulldown/Warm-up		22	-
Safety Factor	5/ 10 %	142	270
Total Zone Loads		2,982	2,974

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	18	240	-	159
E	0	0	-	0
SE	0	0	-	0
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	0	0	-	0
N	0	0	-	0
Glass : NE	4	400	474	318
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	0	0	0	0
N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC CONTROL 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : . / ENGINEERS Page 1 of 2

****

Zone Name: DSC CONTROL

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 2,521 W	Load occurs	@ Aug 1600
Sensible coil load	= 2,364 W	Outdoor Db/Wb	= 39.6/ 21.0 C
Total zone sensible	= 1,995 W	Coil Conditions:	
Supply temperature	= 16.0 C	Entering Db/Wb	= 24.3/ 15.1 C
Supply air (actual)	= 259 L/s	Leaving Db/Wb	= 16.0/ 11.6 C
Supply air (std)	= 236 L/s	Apparatus dewpoint	= 7.7 C
Ventilation air	= 20 L/s	Bypass factor	= 0.500
Direct exhaust air	= 0 L/s	Resulting zone RH	= 39.4 %
Reheat required	= 0 W		

Floor area (sqm)	= 10	Total coil load	= 2.52 kW
Overall U-value	= 0.733	Sensible coil load	= 2.36 kW
ıt air L/s/sqm	= 1.92	SQM/kW	= 4.13
V ..t air L/s/person	= 10.00	Cooling W/sqm	= 242.37
		Cooling L/s/sqm	= 24.88

TABLE 2. SIZING DATA -- HEATING

model 15'

Heating coil load	= 1,713 W	Heating W/sqm	= 164.69
Ventilation load	= 242 W	Heating L/s/sqm	= 24.88
Total zone load	= 1,471 W	Floor area (sqm)	= 10
Ventilation airflow	= 20 L/s	Overall U-value	= 0.733
Supply airflow	= 259 L/s	Vent air L/s/sqm	= 1.92
		Vent air L/s/person	= 10.00

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
. a Source	= User Modified	Daily Range	= 14.0 K
' .itude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
...evation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 12 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 21.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 16.0 C	Coil Bypass	: 0.500
Ventilation	: 20 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 %	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: N
Configuration	: Draw-Thru		
Static Pressure	: 10.00 Pa.		

SYSTEM SIZING SUMMARY

System Name : DSC CONTROL 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : ... / ENGINEERS

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) Aug/1600	2.36	2.52	6) July/1700	2.34	2.50
2) Aug/1500	2.35	2.51	7) June/1600	2.32	2.49
3) Aug/1700	2.36	2.51	8) June/1500	2.31	2.48
4) July/1600	2.35	2.51	9) June/1700	2.31	2.48
5) July/1500	2.35	2.50	10) Aug/1400	2.32	2.47

TABLE 6. ZONE SIZING DATA

Zone Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC CONTROL	2,008		123 @ Aug 1800	1,471	

DETAILED SYSTEM LOAD REPORT

System Name : DSC CONTROL 19-02-00
Location : MAI'N. Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

****

Zone Name: DSC CONTROL

TABLE 1. LOAD COMPONENT SUMMARY for Aug 1600 (39.6/ 21.0 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	0 sqm	0	-	-
Wall Transmission	24 sqm	340	-	211
Roof Transmission	10 sqm	120	-	66
Glass Transmission	0 sqm	0	-	0
Skylight Transmission	0 sqm	0	-	0
Partitions	36 sqm	467	-	936
Lighting	28.80 W/sqm	319	-	-
Other Electric	47.85 W/sqm	442	-	-
People	2 people	100	70	-
Infiltration		105	18	140
Miscellaneous		0	0	-
Slab	10 sqm	-	-	-17
Pulldown/Warm-up		6	-	-
Safety Factor	5/ 5/ 10 %	95	4	134
Total Zone Loads		1,995	93	1,471
Ventilation Load	20 L/s	365	63	242
Supply Fan Load	259 L/s	5	-	-
Plenum Load Thru Wall	0 %	0	-	-
Plenum Load Thru Roof	0 %	0	-	-
Plenum Load - Lights	0 %	0	-	-
Total Coil Loads		2,364	156	1,713

TABLE 2. WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	0	0	-	0
E	12	182	-	106
SE	0	0	-	0
S	12	158	-	106
SW	0	0	-	0
W	0	0	-	0
NW	0	0	-	0
N	0	0	-	0
Glass : NE	0	0	0	0
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	0	0	0	0
N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC CONTROL 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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TABLE 1. GENERAL INFORMATION

Zone Name : DSC CONTROL
System Name : DSC CONTROL

Design load @ Aug 1800
Db/Wb temp. : 37.1/ 20.2 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	0 sqm	0	-
Vall Transmission	24 sqm	355	211
Roof Transmission	10 sqm	127	66
Glass Transmission	0 sqm	0	0
Skylight Transmission	0 sqm	0	0
Partitions	36 sqm	467	936
Lighting	28.80 W/sqm	322	-
Other Electric	47.85 W/sqm	447	-
People	2 people	103	-
Infiltration		89	140
Miscellaneous		0	-
Slab	10 sqm	-	-17
Pulldown/Warm-up		3	-
Safety Factor	5/ 10 %	96	134
Total Zone Loads		2,008	1,471

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	0	0	-	0
	E	12	181	-	106
	SE	0	0	-	0
	S	12	174	-	106
	SW	0	0	-	0
	W	0	0	-	0
	NW	0	0	-	0
	N	0	0	-	0
Glass	: NE	0	0	0	0
	E	0	0	0	0
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	0	0	0	0
	N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC SECURITY 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

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Zone Name: DSC SECURITY

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 3,886 W	Load occurs	@ July 1600
Sensible coil load	= 3,529 W	Outdoor Db/Wb	= 39.6/ 21.0 C
Total zone sensible	= 3,157 W	Coil Conditions:	
Supply temperature	= 16.0 C	Entering Db/Wb	= 23.8/ 15.3 C
Supply air (actual)	= 409 L/s	Leaving Db/Wb	= 16.0/ 11.9 C
Supply air (std)	= 374 L/s	Apparatus dewpoint	= 8.2 C
Ventilation air	= 20 L/s	Bypass factor	= 0.500
Direct exhaust air	= 0 L/s	Resulting zone RH	= 42.0 %
Reheat required	= 0 W		

Floor area (sqm)	= 17	Total coil load	= 3.89 kW
Overall U-value	= 0.953	Sensible coil load	= 3.53 kW
·· nt air L/s/sqm	= 1.17	SQM/kW	= 4.40
. ·nt air L/s/person	= 8.25	Cooling W/sqm	= 227.24
		Cooling L/s/sqm	= 23.95

model is

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 1,759 W	Heating W/sqm	= 102.88
Ventilation load	= 242 W	Heating L/s/sqm	= 23.95
Total zone load	= 1,517 W	Floor area (sqm)	= 17
Ventilation airflow	= 20 L/s	Overall U-value	= 0.953
Supply airflow	= 409 L/s	Vent air L/s/sqm	= 1.17
		Vent air L/s/person	= 8.25

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
·· ·a Source	= User Modified	Daily Range	= 14.0 K
..itude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 000	Cooling (Occ)	: 23.0 C
Duration	: 24 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 21.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 16.0 C	Coil Bypass	: 0.500
Ventilation	: 20 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 %	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: N
Configuration	: Draw-Thru		
Static Pressure	: 10.00 Pa.		

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1600	3.53	3.89	6) June/1500	3.48	3.85
2) June/1600	3.51	3.88	7) Aug/1600	3.46	3.81
3) July/1700	3.52	3.88	8) Aug/1700	3.44	3.80
4) June/1700	3.50	3.87	9) June/1800	3.43	3.80
5) July/1500	3.50	3.85	10) July/1800	3.44	3.79

TABLE 6. ZONE SIZING DATA

Zone Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC SECURITY	3,169	194	@July 1700	1,517	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC SECURITY 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

****

Zone Name: DSC SECURITY

TABLE 1. LOAD COMPONENT SUMMARY for July 1600 (39.6/ 21.0 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	2 sqm	275	-	-
Wall Transmission	40 sqm	531	-	354
Roof Transmission	17 sqm	209	-	109
Glass Transmission	2 sqm	207	-	161
Skylight Transmission	0 sqm	0	-	0
Partitions	24 sqm	273	-	547
Lighting	38.00 W/sqm	776	-	-
Other Electric	11.70 W/sqm	200	-	-
People	2 people	163	85	-
Infiltration		173	18	230
Miscellaneous		200	200	-
Slab	14 sqm	-	-	-23
Pulldown/Warm-up		0	-	-
Safety Factor	5/ 5/ 10 %	150	15	138
Total Zone Loads		3,157	318	1,517
Ventilation Load	20 L/s	365	38	242
Supply Fan Load	409 L/s	8	-	-
Plenum Load Thru Wall	0 %	0	-	-
Plenum Load Thru Roof	0 %	0	-	-
Plenum Load - Lights	0 %	0	-	-
Total Coil Loads		3,529	357	1,759

TABLE 2. WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	17	229	-	151
E	0	0	-	0
SE	15	216	-	133
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	8	86	-	71
N	0	0	-	0
Glass : NE	1	103	108	80
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	1	105	167	81
N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC SECURITY 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : . . ; ENGINEERS Page 1 of 1

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TABLE 1. GENERAL INFORMATION

Zone Name : DSC SECURITY
System Name : DSC SECURITY

Design load @ July 1700
Db/Wb temp. : 38.6/ 20.7 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	2 sqm	283	-
Wall Transmission	40 sqm	545	354
Roof Transmission	17 sqm	216	109
Glass Transmission	2 sqm	199	161
Skylight Transmission	0 sqm	0	0
Partitions	24 sqm	273	547
Lighting	38.00 W/sqm	776	-
Other Electric	11.70 W/sqm	200	-
People	2 people	163	-
Infiltration		163	230
Miscellaneous		200	-
Slab	14 sqm	-	-23
Pulldown/Warm-up		0	-
Safety Factor	5/ 10 %	151	138
Total Zone Loads		3,169	1,517

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	17	231	-	151
	E	0	0	-	0
	SE	15	218	-	133
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	8	96	-	71
	N	0	0	-	0
Glass	: NE	1	99	103	80
	E	0	0	0	0
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	1	100	180	81
	N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC OFFICE 04-03-00
Location : MAI'N, Jordan Block Load v2.00
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Zone Name: DSC OFFICE

TABLE 1. SIZING DATA -- COOLING

model 25

Total coil load	= 7,604 W	Load occurs	@ Aug 1500
Sensible coil load	= 7,211 W	Outdoor Db/Wb	= 40.0/ 21.1 C
Total zone sensible	= 5,678 W	Coil Conditions:	
Supply temperature	= 15.0 C	Entering Db/Wb	= 25.1/ 16.1 C
Supply air (actual)	= 644 L/s	Leaving Db/Wb	= 14.9/ 12.0 C
Supply air (std)	= 588 L/s	Apparatus dewpoint	= 9.5 C
Ventilation air	= 80 L/s	Bypass factor	= 0.350
Direct exhaust air	= 0 L/s	Resulting zone RH	= 43.9 %
Reheat required	= 0 W		

Floor area (sqm)	= 43	Total coil load	= 7.60 kW
Overall U-value	= 1.047	Sensible coil load	= 7.21 kW
Vent air L/s/sqm	= 1.85	SQM/kW	= 5.69
Vent air L/s/person	= 10.00	Cooling W/sqm	= 175.77
		Cooling L/s/sqm	= 14.90

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 4,348 W	Heating W/sqm	= 100.51
Ventilation load	= 969 W	Heating L/s/sqm	= 14.90
Total zone load	= 3,379 W	Floor area (sqm)	= 43
Ventilation airflow	= 80 L/s	Overall U-value	= 1.047
Supply airflow	= 644 L/s	Vent air L/s/sqm	= 1.85
		Vent air L/s/person	= 10.00

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
Data Source	= User Modified	Daily Range	= 14.0 K
Latitude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 14 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 21.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 15.0 C	Coil Bypass	: 0.350
Ventilation	: 80 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: N
Configuration	: Draw-Thru		
Static Pressure	: 30.00 Pa.		

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TABLE 5. TOP TEN COOLING COIL LOADS

	Sensible	Total		Sensible	Total
Time	kW	kW	Time	kW	kW
1) Aug/1500	7.21	7.60	6) June/1500	7.02	7.46
2) Aug/1600	7.16	7.56	7) July/1400	7.06	7.46
3) July/1500	7.15	7.54	8) June/1600	6.97	7.42
4) Aug/1400	7.13	7.53	9) Aug/1700	7.02	7.41
5) July/1600	7.10	7.50	10) June/1400	6.93	7.38

TABLE 6. ZONE SIZING DATA

Zone Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC OFFICE	5,678	304	@ Aug 1500	3,379	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC OFFICE 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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Zone Name: DSC OFFICE

TABLE 1. LOAD COMPONENT SUMMARY for Aug 1500 (40.0/ 21.1 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	5 sqm	570	-	-
Wall Transmission	25 sqm	381	-	221
Roof Transmission	43 sqm	478	-	276
Glass Transmission	5 sqm	449	-	344
Skylight Transmission	0 sqm	0	-	0
Partitions	68 sqm	857	-	1,718
Lighting	18.50 W/sqm	863	-	-
Other Electric	23.12 W/sqm	900	-	-
People	8 people	414	281	-
Infiltration		450	22	582
Miscellaneous		0	0	-
Slab	43 sqm	-	-	-70
Pulldown/Warm-up		45	-	-
Safety Factor	5/ 5/ 10 %	270	15	307
Total Zone Loads		5,678	319	3,379
Ventilation Load	80 L/s	1,498	74	969
Supply Fan Load	644 L/s	36	-	-
Plenum Load Thru Wall	0 %	0	-	-
Plenum Load Thru Roof	0 %	0	-	-
Plenum Load - Lights	0 %	0	-	-
Total Coil Loads		7,211	392	4,348

TABLE 2. WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	0	0	-	0
	E	0	0	-	0
	SE	25	381	-	221
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	0	0	-	0
	N	0	0	-	0
Glass	NE	0	0	0	0
	E	0	0	0	0
	SE	5	449	570	344
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	0	0	0	0
	N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC OFFICE 04-03-00
Location : MAI'N. Jordan Block Load v2.00
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TABLE 1. GENERAL INFORMATION

Zone Name : DSC OFFICE
System Name : DSC OFFICE

Design load @ Aug 1500
Db/Wb temp. : 40.0/ 21.1 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	5 sqm	570	-
Wall Transmission	25 sqm	381	221
Roof Transmission	43 sqm	478	276
Glass Transmission	5 sqm	449	344
Skylight Transmission	0 sqm	0	0
Partitions	68 sqm	857	1,718
Lighting	18.50 W/sqm	863	-
Other Electric	23.12 W/sqm	900	-
People	8 people	414	-
Infiltration		450	582
Miscellaneous		0	-
Slab	43 sqm	-	-70
Pulldown/Warm-up		45	-
Safety Factor	5/ 10 %	270	307
Total Zone Loads		5,678	3,379

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	0	0	-	0
	E	0	0	-	0
	SE	25	381	-	221
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	0	0	-	0
	N	0	0	-	0
Glass	: NE	0	0	0	0
	E	0	0	0	0
	SE	5	449	570	344
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	0	0	0	0
	N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC LABORATORY 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

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Zone Name: DSC LABORATORY

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 4,630 W	Load occurs	@ June 1700
Sensible coil load	= 4,437 W	Outdoor Db/Wb	= 38.1/ 20.7 C
Total zone sensible	= 3,680 W	Coil Conditions:	
Supply temperature	= 14.1 C	Entering Db/Wb	= 24.8/ 15.4 C
Supply air (actual)	= 375 L/s	Leaving Db/Wb	= 14.0/ 11.0 C
Supply air (std)	= 343 L/s	Apparatus dewpoint	= 8.3 C
Ventilation air	= 20 L/s	Bypass factor	= 0.350
Direct exhaust air	= 0 L/s	Resulting zone RH	= 40.2 %
Reheat required	= 0 W		

psp 20

RAC 8cp X3

800 cfm

Floor area (sqm)	= 25	Total coil load	= 4.63 kW
Overall U-value	= 1.424	Sensible coil load	= 4.44 kW
nt air L/s/sqm	= 0.79	SQM/kW	= 5.49
ent air L/s/person	= 10.00	Cooling W/sqm	= 182.26
		Cooling L/s/sqm	= 14.78

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 2,066 W	Heating W/sqm	= 81.35
Ventilation load	= 176 W	Heating L/s/sqm	= 14.78
Total zone load	= 1,890 W	Floor area (sqm)	= 25
Ventilation airflow	= 20 L/s	Overall U-value	= 1.424
Supply airflow	= 375 L/s	Vent air L/s/sqm	= 0.79
		Vent air L/s/person	= 10.00

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
a Source	= User Modified	Daily Range	= 14.0 K
titude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 14 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 18.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 14.1 C	Coil Bypass	: 0.350
Ventilation	: 20 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: Y
Configuration	: Draw-Thru	% Roof Load	: 70
Static Pressure	: 30.00 Pa.	% Lighting Load	: 30
		% Wall Load	: 35

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) June/1700	4.44	4.63	6) June/1500	4.25	4.44
2) July/1700	4.42	4.60	7) July/1500	4.24	4.42
3) June/1600	4.39	4.58	8) July/1800	4.24	4.41
4) July/1600	4.38	4.56	9) Aug/1700	4.22	4.40
5) June/1800	4.28	4.47	10) Aug/1600	4.21	4.38

TABLE 6. ZONE SIZING DATA

Zone Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC LABORATORY	3,680	177	@June 1700	1,890	-

DETAILED SYSTEM LOAD REPORT

System Name : DSS LABORATORY 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1
****

Zone Name: DSC LABORATORY

TABLE 1. LOAD COMPONENT SUMMARY for June 1700 (38.1/ 20.7 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	6 sqm	989	-	-
Wall Transmission	14 sqm	107	-	89
Roof Transmission	25 sqm	96	-	118
Glass Transmission	6 sqm	500	-	306
Skylight Transmission	0 sqm	0	-	0
Partitions	56 sqm	726	-	1,019
Lighting	15.75 W/sqm	280	-	-
Other Electric	19.69 W/sqm	454	-	-
People	2 people	106	70	-
Infiltration		234	48	249
Miscellaneous		0	0	-
Slab	25 sqm	-	-	-62
Pulldown/Warm-up		14	-	-
Safety Factor	5/ 5/ 10 %	175	6	172
Total Zone Loads		3,680	125	1,890
Ventilation Load	20 L/s	309	68	176
Supply Fan Load	375 L/s	21	-	-
Plenum Load Thru Wall	35 %	58	-	-
Plenum Load Thru Roof	70 %	225	-	-
Plenum Load - Lights	30 %	144	-	-
Total Coil Loads		4,437	193	2,066

TABLE 2. WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	0	0	-	0
E	0	0	-	0
SE	0	0	-	0
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	14	107	-	89
N	0	0	-	0
Glass : NE	0	0	0	0
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	6	500	989	306
N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSS LABORATORY 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

****

TABLE 1. GENERAL INFORMATION

Zone Name : DSC LABORATORY
System Name : DSS LABORATORY

Design load @ June 1700
Db/Wb temp. : 38.1/ 20.7 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	6 sqm	989	-
Wall Transmission	14 sqm	107	89
Roof Transmission	25 sqm	96	118
Glass Transmission	6 sqm	500	306
Skylight Transmission	0 sqm	0	0
Partitions	56 sqm	726	1,019
Lighting	15.75 W/sqm	280	-
Other Electric	19.69 W/sqm	454	-
People	2 people	106	-
Infiltration		234	249
Miscellaneous		0	-
Slab	25 sqm	-	-62
Pulldown/Warm-up		14	-
Safety Factor	5/ 10 %	175	172
Total Zone Loads		3,680	1,890

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	0	0	-	0
	E	0	0	-	0
	SE	0	0	-	0
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	14	107	-	89
	N	0	0	-	0
Glass	: NE	0	0	0	0
	E	0	0	0	0
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	6	500	989	306
	N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC CONFERENCE FOYER 01-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

****

Zone Name: DSC CONFERENCE FOYER

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 4,091 W	Load occurs	@ July 1700
Sensible coil load	= 4,091 W	Outdoor Db/Wb	= 38.6/ 20.7 C
Total zone sensible	= 2,537 W	Coil Conditions:	
Supply temperature	= 16.9 C	Entering Db/Wb	= 26.7/ 17.7 C
Supply air (actual)	= 376 L/s	Leaving Db/Wb	= 16.8/ 14.1 C
Supply air (std)	= 343 L/s	Apparatus dewpoint	= 13.5 C
Ventilation air	= 60 L/s	Bypass factor	= 0.250
Direct exhaust air	= 0 L/s	Resulting zone RH	= 52.1 %
Reheat required	= 0 W		

DSP 15 + RAC 8 C Bp 0.3 800 cfm

Floor area (sqm)	= 25	Total coil load	= 4.09 kW
Overall U-value	= 0.976	Sensible coil load	= 4.09 kW
Vent air L/s/sqm	= 2.41	SQM/kW	= 6.09
Vent air L/s/person	= 10.00	Cooling W/sqm	= 164.10
		Cooling L/s/sqm	= 15.10

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 1,761 W	Heating W/sqm	= 70.66
Ventilation load	= 529 W	Heating L/s/sqm	= 15.10
Total zone load	= 1,233 W	Floor area (sqm)	= 25
Ventilation airflow	= 60 L/s	Overall U-value	= 0.976
Supply airflow	= 376 L/s	Vent air L/s/sqm	= 2.41
		Vent air L/s/person	= 10.00

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
Data Source	= User Modified	Daily Range	= 14.0 K
Latitude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 14 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 18.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 16.9 C	Coil Bypass	: 0.250
Ventilation	: 60 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: Y
Configuration	: Draw-Thru	% Roof Load	: 70
Static Pressure	: 30.00 Pa.	% Lighting Load	: 30
		% Wall Load	: 35

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1700	4.09	4.09	6) Aug/1600	3.99	3.99
2) July/1600	4.09	4.09	7) Aug/1700	3.99	3.99
3) June/1700	4.05	4.05	8) June/1500	3.96	3.96
4) June/1600	4.04	4.04	9) July/1800	3.94	3.94
5) July/1500	4.00	4.00	10) June/1800	3.92	3.92

TABLE 6. ZONE SIZING DATA

...ne Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC CONFERENCE FOYER	2,538	178	@June 1700	1,233	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC CONFERENCE FOYER 01-03-00

Location : MAI'N, Jordan Block Load v2.00

Prepared By : / ENGINEERS Page 1 of 1

****

Zone Name: DSC CONFERENCE FOYER

TABLE 1. LOAD COMPONENT SUMMARY for July 1700 (38.6/ 20.7 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	3 sqm	466	-	-
Wall Transmission	36 sqm	296	-	233
Roof Transmission	25 sqm	95	-	116
Glass Transmission	3 sqm	260	-	153
Skylight Transmission	0 sqm	0	-	0
Partitions	24 sqm	311	-	436
Lighting	24.10 W/sqm	420	-	-
Other Electric	0.00 W/sqm	0	-	-
People	6 people	317	211	-
Infiltration		238	-41	244
Miscellaneous		0	0	-
Slab	25 sqm	-	-	-61
Pulldown/Warm-up		13	-	-
Safety Factor	5/ 5/ 10 %	121	8	112
Total Zone Loads		2,537	178	1,233
Ventilation Load	60 L/s	937	-178	529
Supply Fan Load	376 L/s	21	-	-
Plenum Load Thru Wall	35 %	160	-	-
Plenum Load Thru Roof	70 %	221	-	-
Plenum Load - Lights	30 %	216	-	-
Total Coil Loads		4,091	0	1,761

TABLE 2. WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	0	0	-	0
	E	0	0	-	0
	SE	0	0	-	0
	S	0	0	-	0
	SW	16	137	-	101
	W	0	0	-	0
	NW	21	160	-	132
	N	0	0	-	0
Glass	NE	0	0	0	0
	E	0	0	0	0
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	3	260	466	153
	N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC CONFERENCE FOYER 01-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : ENGINEERS Page 1 of 1

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TABLE 1. GENERAL INFORMATION

Zone Name : DSC CONFERENCE FOYER
System Name : DSC CONFERENCE FOYER

Design load @ June 1700
Db/Wb temp. : 38.1/ 20.7 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	3 sqm	494	-
Wall Transmission	36 sqm	289	233
Roof Transmission	25 sqm	95	116
Glass Transmission	3 sqm	249	153
Skylight Transmission	0 sqm	0	0
Partitions	24 sqm	311	436
Lighting	24.10 W/sqm	420	-
Other Electric	0.00 W/sqm	0	-
People	6 people	317	-
Infiltration		230	244
Miscellaneous		0	-
Slab	25 sqm	-	-61
Pulldown/Warm-up		13	-
Safety Factor	5/ 10 %	121	112
Total Zone Loads		2,538	1,233

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	0	0	-	0
	E	0	0	-	0
	SE	0	0	-	0
	S	0	0	-	0
	SW	16	130	-	101
	W	0	0	-	0
	NW	21	159	-	132
	N	0	0	-	0
Glass	NE	0	0	0	0
	E	0	0	0	0
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	3	249	494	153
	N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC SHOP 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

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Zone Name: DSC SHOP

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 4,726 W	Load occurs	@ June 1700
Sensible coil load	= 4,499 W	Outdoor Db/Wb	= 38.1/ 20.7 C
Total zone sensible	= 3,431 W	Coil Conditions:	
Supply temperature	= 14.7 C	Entering Db/Wb	= 25.5/ 15.9 C
Supply air (actual)	= 376 L/s	Leaving Db/Wb	= 14.7/ 11.5 C
Supply air (std)	= 343 L/s	Apparatus dewpoint	= 8.8 C
Ventilation air	= 30 L/s	Bypass factor	= 0.350
Direct exhaust air	= 0 L/s	Resulting zone RH	= 41.9 %
Reheat required	= 0 W		

Floor area (sqm)	= 25	Total coil load	= 4.73 kW
Overall U-value	= 0.976	Sensible coil load	= 4.50 kW
Vent air L/s/sqm	= 1.20	SQM/kW	= 5.28
Vent air L/s/person	= 10.00	Cooling W/sqm	= 189.56
		Cooling L/s/sqm	= 15.09

DSP20 RAC 8 CP X3
800 cfm.

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 3,039 W	Heating W/sqm	= 121.90
Ventilation load	= 264 W	Heating L/s/sqm	= 15.09
Total zone load	= 2,775 W	Floor area (sqm)	= 25
Ventilation airflow	= 30 L/s	Overall U-value	= 0.976
Supply airflow	= 376 L/s	Vent air L/s/sqm	= 1.20
		Vent air L/s/person	= 10.00

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
Data Source	= User Modified	Daily Range	= 14.0 K
Latitude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 14 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 18.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 14.7 C	Coil Bypass	: 0.350
Ventilation	: 30 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: Y
Configuration	: Draw-Thru	% Roof Load	: 70
Static Pressure	: 30.00 Pa.	% Lighting Load	: 30
		% Wall Load	: 35

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) June/1700	4.50	4.73	6) June/1800	4.40	4.62
2) July/1700	4.51	4.71	7) July/1500	4.42	4.62
3) June/1600	4.48	4.71	8) July/1800	4.39	4.59
4) July/1600	4.49	4.70	9) Aug/1700	4.37	4.57
5) June/1500	4.40	4.63	10) Aug/1600	4.37	4.57

TABLE 6. ZONE SIZING DATA

Zone Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC SHOP	3,431	178	@June 1700	2,775	

DETAILED SYSTEM LOAD REPORT

System Name : DSC SHOP 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : . . / ENGINEERS Page 1 of 1
****

Zone Name: DSC SHOP

TABLE 1. LOAD COMPONENT SUMMARY for June 1700 (38.1/ 20.7 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Latent (W)	Design Heating (W)
Solar Loads	3 sqm	494	-	-
Wall Transmission	36 sqm	299	-	233
Roof Transmission	25 sqm	95	-	116
Glass Transmission	3 sqm	249	-	153
Skylight Transmission	0 sqm	0	-	0
Partitions	54 sqm	1,310	-	1,838
Lighting	24.10 W/sqm	420	-	-
Other Electric	0.00 W/sqm	0	-	-
People	3 people	159	106	-
Infiltration		230	36	244
Miscellaneous		0	0	-
Slab	25 sqm	-	-	-61
Pulldown/Warm-up		13	-	-
Safety Factor	5/ 5/ 10 %	163	7	252
Total Zone Loads		3,431	149	2,775
Ventilation Load	30 L/s	450	78	264
Supply Fan Load	376 L/s	21	-	-
Plenum Load Thru Wall	35 %	161	-	-
Plenum Load Thru Roof	70 %	221	-	-
Plenum Load - Lights	30 %	216	-	-
Total Coil Loads		4,499	227	3,039

TABLE 2. WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	16	139	-	101
E	0	0	-	0
SE	0	0	-	0
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	21	159	-	132
N	0	0	-	0
Glass : NE	0	0	0	0
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	3	249	494	153
N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC SHOP 04-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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TABLE 1. GENERAL INFORMATION

Zone Name : DSC SHOP
System Name : DSC SHOP

Design load @ June 1700
Db/Wb temp. : 38.1/ 20.7 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	3 sqm	494	-
Wall Transmission	36 sqm	299	233
Roof Transmission	25 sqm	95	116
Glass Transmission	3 sqm	249	153
Skylight Transmission	0 sqm	0	0
Partitions	54 sqm	1,310	1,838
Lighting	24.10 W/sqm	420	-
Other Electric	0.00 W/sqm	0	-
People	3 people	159	-
Infiltration		230	244
Miscellaneous		0	-
Slab	25 sqm	-	-61
Pulldown/Warm-up		13	-
Safety Factor	5/ 10 %	163	252
Total Zone Loads		3,431	2,775

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	16	139	-	101
E	0	0	-	0
SE	0	0	-	0
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	21	159	-	132
N	0	0	-	0
Glass : NE	0	0	0	0
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	3	249	494	153
N	0	0	0	0

SYSTEM SIZING SUMMARY

System Name : DSC TICKET 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 2

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Zone Name: DSC TICKET

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 2,328 W	Load occurs	@ July 1600
Sensible coil load	= 2,137 W	Outdoor Db/Wb	= 39.6/ 21.0 C
Total zone sensible	= 1,460 W	Coil Conditions:	
Supply temperature	= 16.0 C	Entering Db/Wb	= 26.2/ 15.6 C
Supply air (actual)	= 189 L/s	Leaving Db/Wb	= 16.0/ 11.2 C
Supply air (std)	= 173 L/s	Apparatus dewpoint	= 6.5 C
Ventilation air	= 20 L/s	Bypass factor	= 0.480
Direct exhaust air	= 0 L/s	Resulting zone RH	= 37.7 %
Reheat required	= 0 W		

Floor area (sqm)	= 16	Total coil load	= 2.33 kW
Overall U-value	= 0.710	Sensible coil load	= 2.14 kW
Vent air L/s/sqm	= 1.23	SQM/kW	= 7.01
Vent air L/s/person	= 10.19	Cooling W/sqm	= 142.72
		Cooling L/s/sqm	= 11.61

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 1,787 W	Heating W/sqm	= 109.57
Ventilation load	= 242 W	Heating L/s/sqm	= 11.61
Total zone load	= 1,545 W	Floor area (sqm)	= 16
Ventilation airflow	= 20 L/s	Overall U-value	= 0.710
Supply airflow	= 189 L/s	Vent air L/s/sqm	= 1.23
		Vent air L/s/person	= 10.19

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
Data Source	= User Modified	Daily Range	= 14.0 K
Latitude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
Elevation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 12 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 21.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 16.0 C	Coil Bypass	: 0.480
Ventilation	: 20 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 %	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: Y
Configuration	: Draw-Thru	% Roof Load	: 70
Static Pressure	: 10.00 Pa.	% Lighting Load	: 30
		% Wall Load	: 30

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1600	2.14	2.33	6) June/1500	2.11	2.31
2) July/1500	2.14	2.33	7) July/1700	2.12	2.31
3) Aug/1600	2.13	2.32	8) Aug/1700	2.11	2.30
4) Aug/1500	2.13	2.32	9) July/1400	2.11	2.30
5) June/1600	2.11	2.31	10) June/1700	2.09	2.29

TABLE 6. ZONE SIZING DATA

..e Name	Maximum Design Cooling Sensible (W)	Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC TICKET	1,461		89 @ Aug 1600	1,545	

DETAILED SYSTEM LOAD REPORT

System Name : DSC TICKET 19-02-00
Location : MAI'N. Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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Zone Name: DSC TICKET

TABLE 1. LOAD COMPONENT SUMMARY for July 1600 (39.6/ 21.0 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	0 sqm	0	-	-
Wall Transmission	24 sqm	230	-	207
Roof Transmission	16 sqm	60	-	104
Glass Transmission	0 sqm	0	-	0
Skylight Transmission	0 sqm	0	-	0
Partitions	35 sqm	449	-	900
Lighting	18.40 W/sqm	201	-	-
Other Electric	12.26 W/sqm	178	-	-
People	2 people	98	69	-
Infiltration		165	36	220
Miscellaneous		0	0	-
Slab	16 sqm	-	-	-26
Pulldown/Warm-up		9	-	-
Safety Factor	5/ 5/ 10 %	70	5	140
Total Zone Loads		1,460	111	1,545
Ventilation Load	20 L/s	328	80	242
Supply Fan Load	189 L/s	4	-	-
Plenum Load Thru Wall	30 %	99	-	-
Plenum Load Thru Roof	70 %	140	-	-
Plenum Load - Lights	30 %	108	-	-
Total Coil Loads		2,137	190	1,787

TABLE 2. WALL AND GLASS BREAKDOWN

Component	Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls : NE	8	76	-	72
E	0	0	-	0
SE	15	154	-	136
S	0	0	-	0
SW	0	0	-	0
W	0	0	-	0
NW	0	0	-	0
N	0	0	-	0
Glass : NE	0	0	0	0
E	0	0	0	0
SE	0	0	0	0
S	0	0	0	0
SW	0	0	0	0
W	0	0	0	0
NW	0	0	0	0
N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC TICKET 19-02-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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TABLE 1. GENERAL INFORMATION

Zone Name : DSC TICKET
System Name : DSC TICKET

Design load @ Aug 1600
Db/Wb temp. : 39.6/ 21.0 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	0 sqm	0	-
Wall Transmission	24 sqm	235	207
Roof Transmission	16 sqm	56	104
Glass Transmission	0 sqm	0	0
Skylight Transmission	0 sqm	0	0
Partitions	35 sqm	449	900
Lighting	18.40 W/sqm	201	-
Other Electric	12.26 W/sqm	178	-
People	2 people	98	-
Infiltration		165	220
Miscellaneous		0	-
Slab	16 sqm	-	-26
Pulldown/Warm-up		9	-
Safety Factor	5/ 10 %	70	140
Total Zone Loads		1,461	1,545

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	: NE	8	69	-	72
	E	0	0	-	0
	SE	15	166	-	136
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	0	0	-	0
	N	0	0	-	0
Glass	: NE	0	0	0	0
	E	0	0	0	0
	SE	0	0	0	0
	S	0	0	0	0
	SW	0	0	0	0
	W	0	0	0	0
	NW	0	0	0	0
	N	0	0	0	0

4 x DSP 53 +
cm 20 x 4

SYSTEM SIZING SUMMARY

System Name : DSC CORRIDOR 01-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : [redacted] / ENGINEERS Page 1 of 2

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Zone Name: DSC CORRIDOR

TABLE 1. SIZING DATA -- COOLING

Total coil load	= 41,030 W	Load occurs	@ July 1600
Sensible coil load	= 40,772 W	Outdoor Db/Wb	= 39.6/ 21.0 C
Total zone sensible	= 38,315 W	Coil Conditions:	
Supply temperature	= 13.8 C	Entering Db/Wb	= 23.5/ 14.8 C
Supply air (actual)	= 3,773 L/s	Leaving Db/Wb	= 13.7/ 10.8 C
Supply air (std)	= 3,442 L/s	Apparatus dewpoint	= 8.4 C
Ventilation air	= 0 L/s	Bypass factor	= 0.350
Direct exhaust air	= 0 L/s	Resulting zone RH	= 39.6 %
Reheat required	= 0 W		

Floor area (sqm)	= 143	Total coil load	= 41.03 kW
Overall U-value	= 4.058	Sensible coil load	= 40.77 kW
[illegible]nt air L/s/sqm	= 0.00	SQM/kW	= 3.50
[illegible]nt air L/s/person	= 0.00	Cooling W/sqm	= 286.12
		Cooling L/s/sqm	= 26.31

TABLE 2. SIZING DATA -- HEATING

Heating coil load	= 16,147 W	Heating W/sqm	= 112.60
Ventilation load	= 0 W	Heating L/s/sqm	= 26.31
Total zone load	= 16,147 W	Floor area (sqm)	= 143
Ventilation airflow	= 0 L/s	Overall U-value	= 4.058
Supply airflow	= 3,773 L/s	Vent air L/s/sqm	= 0.00
		Vent air L/s/person	= 0.00

TABLE 3. INPUT DATA -- WEATHER

City	= MAI'N	Summer dry-bulb	= 40.0 C
State	= Jordan	Coincident wet-bulb	= 21.1 C
[illegible]ta Source	= User Modified	Daily Range	= 14.0 K
[illegible]itude	= 32.0 deg.	Winter dry-bulb	= 10.0 C
[illegible]evation	= 107.0 m	Atmos. Clear. Num.	= 1.00

TABLE 4. INPUT DATA -- HVAC SYSTEM

System Type	: Clg & Warm Air Htg	THERMOSTAT SETPOINTS	
System Start	: 800	Cooling (Occ)	: 23.0 C
Duration	: 14 hrs	Cooling (Unocc)	: 28.0 C
		Heating	: 18.0 C
SIZING SPECIFICATIONS		FACTORS	
Supply	: 13.8 C	Coil Bypass	: 0.350
Ventilation	: 0 L/s	Safety (Sens)	: 5 %
Exhaust	: 0 L/s	Safety (Latent)	: 5 %
		Heating Safety	: 10 %
FAN		RETURN AIR PLENUM	: Y
Configuration	: Draw-Thru	% Roof Load	: 70
Static Pressure	: 30.00 Pa.	% Lighting Load	: 30
		% Wall Load	: 35

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TABLE 5. TOP TEN COOLING COIL LOADS

Time	Sensible kW	Total kW	Time	Sensible kW	Total kW
1) July/1600	40.77	41.03	6) July/1700	39.75	40.01
2) July/1500	40.56	40.81	7) June/1500	39.57	39.87
3) Aug/1600	40.53	40.79	8) Aug/1700	39.33	39.59
4) Aug/1500	40.35	40.60	9) July/1400	39.05	39.31
5) June/1600	39.80	40.10	10) Aug/1400	38.89	39.15

TABLE 6. ZONE SIZING DATA

Zone Name	Maximum Cooling Sensible (W)	Design Airflow Rate (L/s)	Design Time	Maximum Heating Load (W)	Design Flow Rate (L/s)
DSC CORRIDOR	38,315	1,781	@July 1600	16,147	-

DETAILED SYSTEM LOAD REPORT

System Name : DSC CORRIDOR 01-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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Zone Name: DSC CORRIDOR

TABLE 1. LOAD COMPONENT SUMMARY for July 1600 (39.6/ 21.0 C)

Load Component	Details	Design Cooling Loads Sensible (W)	Design Cooling Loads Latent (W)	Design Heating (W)
Solar Loads	237 sqm	9,915	-	-
Wall Transmission	39 sqm	323	-	251
Roof Transmission	143 sqm	526	-	665
Glass Transmission	237 sqm	22,537	-	12,712
Skylight Transmission	0 sqm	0	-	0
Partitions	0 sqm	0	-	0
Lighting	16.40 W/sqm	1,630	-	-
Other Electric	0.00 W/sqm	0	-	-
People	0 people	0	0	-
filtration		1,453	245	1,404
Miscellaneous		0	0	-
Slab	143 sqm	-	-	-353
Pulldown/Warm-up		107	-	-
Safety Factor	5/ 5/ 10 %	1,825	12	1,468
Total Zone Loads		38,315	257	16,147
Ventilation Load	0 L/s	0	0	0
Supply Fan Load	3,773 L/s	210	-	-
Plenum Load Thru Wall	35 %	174	-	-
Plenum Load Thru Roof	70 %	1,228	-	-
Plenum Load - Lights	30 %	847	-	-
Total Coil Loads		40,772	257	16,147

TABLE 2. WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	8	71	-	52
	E	0	0	-	0
	SE	16	145	-	100
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	16	108	-	99
	N	0	0	-	0
Glass	NE	52	4,979	1,741	2,809
	E	0	0	0	0
	SE	66	6,287	2,236	3,546
	S	0	0	0	0
	SW	52	4,979	2,701	2,809
	W	0	0	0	0
	NW	66	6,291	3,237	3,548
	N	0	0	0	0

DETAILED ZONE LOAD REPORT

System Name : DSC CORRIDOR 01-03-00
Location : MAI'N, Jordan Block Load v2.00
Prepared By : / ENGINEERS Page 1 of 1

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TABLE 1. GENERAL INFORMATION

Zone Name : DSC CORRIDOR
System Name : DSC CORRIDOR

Design load @ July 1600
Db/Wb temp. : 39.6/ 21.0 C

TABLE 2. ZONE LOAD COMPONENT SUMMARY

Load Component	Details	Design Cooling Loads Sensible (W)	Design Heating (W)
Solar Loads	237 sqm	9,915	-
Wall Transmission	39 sqm	323	251
Roof Transmission	143 sqm	526	665
Glass Transmission	237 sqm	22,537	12,712
Skylight Transmission	0 sqm	0	0
Partitions	0 sqm	0	0
Lighting	16.40 W/sqm	1,630	-
Other Electric	0.00 W/sqm	0	-
People	0 people	0	-
Infiltration		1,453	1,404
Miscellaneous		0	-
Slab	143 sqm	-	-353
Pulldown/Warm-up		107	-
Safety Factor	5/ 10 %	1,825	1,468
Total Zone Loads		38,315	16,147

TABLE 3. ZONE WALL AND GLASS BREAKDOWN

Component		Total Net Area (sqm)	Cooling Transmission (W)	Cooling Solar Load (W)	Heating Transmission (W)
Walls	NE	8	71	-	52
	E	0	0	-	0
	SE	16	145	-	100
	S	0	0	-	0
	SW	0	0	-	0
	W	0	0	-	0
	NW	16	108	-	99
	N	0	0	-	0
Glass	NE	52	4,979	1,741	2,809
	E	0	0	0	0
	SE	66	6,287	2,236	3,546
	S	0	0	0	0
	SW	52	4,979	2,701	2,809
	W	0	0	0	0
	NW	66	6,291	3,237	3,548
	N	0	0	0	0