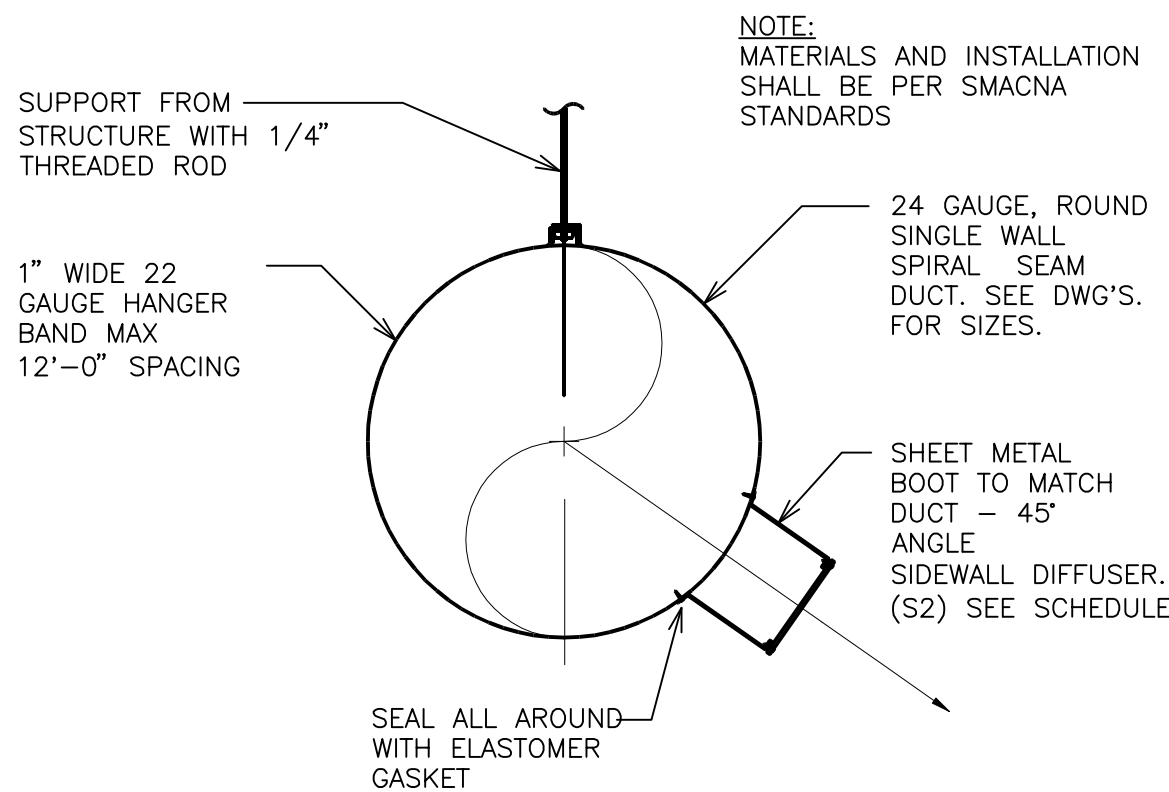


OUTSIDE AIR CALCULATION	
O.A. CALCULATION BASED ON ASHRAE 62.1	
GUEST/MEMBER LOBBY: LOBBIES OCC.= 30p/1000 sqft= 14 P. SQUARE FOOTAGE: 465 SF VENTILATION CALCULATED AT 105 (7.5 cfm/p) + 28 (.06 cfm/sqft) VENTILATION: 133 CFM	
CARDIO/STRENGTH/FUNCTIONAL/FREE WEIGHTS: HEALTH CLUB/WEIGHT ROOM OCC.= 10p/1000 sqft= 32 P. SQUARE FOOTAGE: 3200 SF VENTILATION CALCULATED AT 640 (20 cfm/p) + 192 (.06 cfm/sqft) VENTILATION: 832 CFM	
MANAGERS OFFICE: OFFICE SPACES OCC.= 5p/1000 sqft= 1 P. SQUARE FOOTAGE: 100 SF VENTILATION CALCULATED AT 5 (5 cfm/p) + 7 (.06 cfm/sqft) VENTILATION: 12 CFM	
TRAINERS OFFICE: OFFICE SPACES OCC.= 5p/1000 sqft= 1 P. SQUARE FOOTAGE: 85 SF VENTILATION CALCULATED AT 5 (5 cfm/p) + 5 (.06 cfm/sqft) VENTILATION: 10 CFM	
UTILITY: STORAGE OCC.= N/A 0 P. SQUARE FOOTAGE: 75 SF VENTILATION CALCULATED AT 7 (.12 cfm/sqft) VENTILATION: 7 CFM	
CORRIDOR: HALL OCC.= N/A 0 P. SQUARE FOOTAGE: 110 SF VENTILATION CALCULATED AT 9 (.06 cfm/sqft) VENTILATION: 9 CFM	
TANNING: HEALTH CLUB/WEIGHT ROOM OCC.= 10p/1000 sqft= 1 P. SQUARE FOOTAGE: 102 SF VENTILATION CALCULATED AT 20 (20 cfm/p) + 6 (.06 cfm/sqft) VENTILATION: 26 CFM	
TOTAL OCCUPANCY 49 TOTAL VENTILATION REQUIRED 1029 CFM .80 VENTILATION EFFECTIVENESS 1286 CFM TOTAL VENTILATION SUPPLIED 1290 CFM	

SPACE LOAD CALCULATIONS	
DESIGN TEMPS	
SUMMER	WINTER
O.A.D.B. 99 DEG F	O.A.D.B. 9 DEG F
O.A.W.B 74 DEG F	I.A.D.B. 70 DEG F
I.A.D.B. 75 DEG F	
GAINS	LOSS
SOLAR LOAD 12584 BTUH	
ROOF LOAD 13809 BTUH	23837 BTUH
GLASS LOAD 7705 BTUH	24032 BTUH
WALL LOAD 2120 BTUH	6464 BTUH
LIGHTS 12303 BTUH	
PEOPLE 49	
PEOPLE (SENS) 16337 BTUH	
PEOPLE (LAT) 31960 BTUH	
INFILTRATION (SENS) 2167 BTUH	10780 BTUH
INFILTRATION (LAT) 785 BTUH	
MISCELLANEOUS 15263 BTUH	
VENTILATION (SENS) 29250 BTUH	79980 BTUH
VENTILATION (LAT) 11251 BTUH	
SUPPLY FAN LOAD 5604 BTUH	(5604) BTUH
SENS. LOAD 117412 BTUH	TOTAL 139489 BTUH
TOTAL LOAD 161408 BTUH	
TOTAL CFM 5040	VENT. 1290 CFM



1 EXPOSED SPIRAL DUCT
M2 N.T.S.

DIFFUSER, GRILLE & REGISTER SCHEDULE							
EQUIP. TAG	SERVICE	MOUNTING TYPE	DESCRIPTION	ACCESSORIES	FINISH	MANUF.	MODEL NO.
A	SUPPLY	DUCT MTD.	12"X6"	OBD	SEE NOTE	TITUS	300RL
B	SUPPLY	LAY-IN	24"X24"	OBD	SEE NOTE	TITUS	TMS
C	SUPPLY	SURFACE	12"X12"	OBD	SEE NOTE	TITUS	TMS
D	RETURN	LAY-IN	24"X12" 22"X10" NECK	---	SEE NOTE	TITUS	PAR
E	RETURN	SURFACE	12"X12"	---	SEE NOTE	TITUS	350RL
NOTES: 1. ALL GRILLES, REGISTERS & DIFFUSERS MUST BE PAINTED TO MATCH CEILING TILE COLOR. VERIFY EXACT COLOR WITH ARCHITECT. 2. APPROVED EQUALS ACCEPTED.							

EXHAUST FAN										
TAG	QTY	MANUFACTURER	MODEL NO.	TYPE	CFM	S.P.	WATTS	VOLTAGE	ACCESSORIES	NOTES
EF-1	3	GREENHECK	SP-B200	CEILING	150	.25	128	SEE ELEC	BACKDRAFT DAMPER	1
EF-2	1	GREENHECK	SP-B200	SUSPENDED	150	.25	128	SEE ELEC	BACKDRAFT DAMPER	2
NOTE: 1. TOILET EXHAUST FAN SHALL BE INTERLOCKED WITH TOILET ROOM LIGHT SWITCH. 2. UTILITY EXHAUST FAN SHALL BE INTERLOCKED WITH LIGHT SWITCH.										

ROOFTOP UNIT SCHEDULE																	
MARK	MFG/ MODEL	DISCHARGE	TONS	ESP	CFM	OUTSIDE AIR CFM	ENTERING AIR CONDITIONS	NET COOLING CAPACITY (MBH)		SEER	GAS HEATING CAPACITY		AFUE %	ELECTRIC HEATING K.W	ELECTRICAL VOLT/PH/HZ	ACCESSORIES	UNIT WEIGHT (LBS)
								TOTAL	SENSIBLE		INPUT	OUTPUT					
RTU-1	RHEEM RKKAO60	VERTICAL	5	EX.	1800	500	82F DB 67.4F WB @ 99F AMBIENT	EXISTING	EXISITNG	EXIST.	EXIST.	EXIST.	EXIST.	—	EXISTING	EXISTING	EXISTING
RTU-2	ICP APFM48K	VERTICAL	4	EX.	1440	290	82F DB 67.4F WB @ 99F AMBIENT	EXISTING	EXISITNG	EXIST.	—	—	—	EXISTING	EXISTING	EXISTING	EXISTING
RTU-3	RHEEM RKKAO60	VERTICAL	5	EX.	1800	500	82F DB 67.4F WB @ 99F AMBIENT	EXISTING	EXISITNG	EXIST.	EXIST.	EXIST.	EXIST.	—	EXISTING	EXISTING	EXISTING
NOTE:																	
1. THE MECHANICAL CONTRACTOR SHALL PERFORM SERVICE AND REPAIR OF THE EXISTING ROOFTOP UNIT AND ITS ACCESSORIES AS FOLLOWS, BUT ARE NOT LIMITED TO: CLEAN ALL COILS, REPLACE THE FILTERS AND BELTS, INSPECT, REPAIR OR REPLACE DRIVES, FAN BEARINGS, MOTORS, CONTROL COMPONENTS, VALVES AND ANY OTHER ITEM NECESSARY FOR A COMPLETE AND PROPER OPERATING SYSTEM. THIS CONTRACTOR SHALL ALSO VISIT THE SITE PRIOR TO BIDDING AND VERIFY ALL EXISTING SITE CONDITIONS.																	
2. ALL WORK, EQUIPMENT, AND ACCESSORIES TO BRING EXISTING SYSTEM TO GOOD WORKING CONDITION SHALL BE COVERED UNDER CONTRACTOR'S ORIGINAL BID AND AT NO ADDITIONAL EXPENSE. CONTRACTOR SHALL VERIFY ALL ON SITE CONDITIONS PRIOR TO BID.																	