

ROOFTOP UNIT SCHEDULE (DX COOLING, NATURAL GAS HEATING) (EXISTING TO REMAIN)																								
MARK	AREA SERVED	MANUFACTURER	MODEL	SUPPLY FAN		COOLING COIL						HEAT EXCHANGER				ELECTRICAL			WEIGHT (LBS)	NOTES				
				CFM	ESP (IN)	REFR TYPE	TH (MBH)	SH (MBH)	EAT (T F DB) (T F WB) (T F DB)	LAT (T F WB)	MIN STAGES	MIN NO STAGES	MIN DIA (IN)	MIN IN (IN)	MIN OUT (IN)	MIN STAGES	WPH	MCA			MCCP			
RTU1	WEST BOWLING SEATING	YORK	Z400N	0	0.00	R-410A	244.3	222.3	75.3	82.4	55.0	53.3	ETR	ETR	240.0	300.0	ETR	ETR	0	4800	172.0	200	ETR	A,B
RTU2	EAST BOWLING SEATING	YORK	Z400N	0	0.00	R-410A	244.3	222.3	75.3	82.4	55.0	53.3	ETR	ETR	240.0	300.0	ETR	ETR	0	4800	172.0	200	ETR	A,B
RTU3	WEST CONCOURSE	YORK	Z400N	0	0.00	R-410A	122.1	111.1	37.7	41.2	27.5	26.6	ETR	ETR	120.0	150.0	ETR	ETR	0	2400	86.0	100	ETR	A
RTU4	EAST CONCOURSE	YORK	Z400N	0	0.00	R-410A	122.1	111.1	37.7	41.2	27.5	26.6	ETR	ETR	120.0	150.0	ETR	ETR	0	2400	86.0	100	ETR	A
RTU5	PHD SHOP/OFFICES	YORK	Z400N	0	0.00	R-410A	61.0	55.5	18.8	20.6	13.7	13.3	ETR	ETR	60.0	75.0	ETR	ETR	0	1200	43.0	50	ETR	A
RTU6	BAR STORAGE	YORK	Z400N	0	0.00	R-410A	61.0	55.5	18.8	20.6	13.7	13.3	ETR	ETR	60.0	75.0	ETR	ETR	0	1200	43.0	50	ETR	A
RTU7	KITCHEN/ SNACK BAR	YORK	Z400N	0	0.00	R-410A	61.0	55.5	18.8	20.6	13.7	13.3	ETR	ETR	60.0	75.0	ETR	ETR	0	1200	43.0	50	ETR	A
RTU8	ARCADÉ	YORK	Z400N	0	0.00	R-410A	61.0	55.5	18.8	20.6	13.7	13.3	ETR	ETR	60.0	75.0	ETR	ETR	0	1200	43.0	50	ETR	A

NOTES:  
 A UNITS ARE EXISTING TO REMAIN. REBALANCE UNITS TO CFMS LISTED IN SCHEDULE.  
 B UNIT WITH ZERO CFM INDICATES THAT UNIT IS EXISTING TO REMAIN AND DOES NOT NEED TO BE REBALANCED.

FAN SCHEDULE (CONTRACTOR PROVIDED)													
MARK	SERVICE DESCRIPTION	MANUFACTURER	MODEL	MOUNTING	DRIVE (REL TO DIRECT)	CFM	ESP (IN)	NOM HP	FAN RPM	VOLTAGE	PHASE	WEIGHT (LBS)	NOTES
EF1	KITCHEN EXHAUST	GREENHECK	G400-VG	ROOF	DIRECT	300	0.2	0.15	1572	120	1	20	A-D

NOTES:  
 A PROVIDE STANDARD INSULATED ROOF CURB WITH MINIMUM HEIGHT OF 12 INCHES. PROVIDE SLOPED CURB IF NEEDED TO MATCH ROOF SLOPE.  
 B DIVISION 28 CONTRACTOR TO FURNISH DISCONNECT SWITCH.  
 C INTERLOCK FAN OPERATION WITH TIME CLOCK.  
 D PROVIDE MANUFACTURER'S FAN SPEED CONTROLLER FOR BALANCING PURPOSES.

MAKEUP AIR UNIT (GAS HEATING) (OWNER FURNISHED, CONTRACTOR INSTALLED)															
MARK	AREA SERVED	MANUFACTURER	MODEL	SUPPLY FAN		HEAT EXCHANGER				ELECTRICAL			WEIGHT (LBS)	NOTES	
				CFM	ESP (IN)	MIN IN (IN)	MIN OUT (IN)	MIN HP	MCA	MCCP	WPH	MCA			MCCP
MAU1	KITCHEN	CARTVEAIRE	A3-250-570	3400	0.53	2	125.3	186.0	90	22.0	30	208V	10.0	520	A-D

KITCHEN EXHAUST HOOD SCHEDULE (OWNER FURNISHED, CONTRACTOR INSTALLED)										
MARK	EQUIPMENT SERVED	MANUFACTURER	MODEL	HOOD DIMENSIONS (IN) (L x W x H)	EXHAUST CFM	UP AIR (CFM)	WEIGHT (LBS)	NOTES		
KH1	OVEN, FRYER, GRIDDLE	CARTVEAIRE	5424-N3-2P8F	156 x 70 x 24	2630	150	150	A-D		

NOTES:  
 A HOOD SUPPLIER SHALL PROVIDE HOOD PREPARED FOR WET-TYPE FIRE EXTINGUISHING SYSTEM MEETING REQUIREMENTS OF NFPA 96. HOOD SHALL BE INSTALLED ON A SUBSTANTIAL LEVEL BASE, AS REQUIRED PER LOCAL CODE.  
 B HOOD SUPPLIER SHALL FURNISH HOOD WITH UL LISTED BAFFLE-TYPE GREASE FILTERS, GREASE DRAIN WITH REMOVABLE TRAP, AND UL LISTED MOTOR/ROOF INCANDESCENT LIGHT FIXTURES.  
 C HOOD SUPPLIER SHALL FURNISH STAINLESS STEEL END-CLOSURE PANELS, HOOD TO FINISH CEILING AND 3" HOOD TO FINISH ROOF. HOOD TO BE INSTALLED AS REQUIRED.  
 D HOOD SUPPLIER SHALL FACTORY INSTALL THE HOOD CONTROL PANEL IN THE UTILITY CABINET.  
 E HOOD SUPPLIER SHALL FACTORY INSTALL THE HOOD CONTROL PANEL IN THE UTILITY CABINET.  
 F PROVIDE HOOD FIRE SUPPRESSION SYSTEM MEETING NFPA 96 LOCAL CODES.  
 G PROVIDE INTERLOCK KIT WITH ONE TEMPERATURE SENSITIVE EXHAUST CONTROL TO MEET LOCAL CODE REQUIREMENTS.  
 H MAKE UP AIR UNIT DESIGNED FOR 100 DEGREE F AMBIENT TEMPERATURE.  
 I MAKE UP AIR UNIT DESIGNED FOR ELEVATION OF 132 FEET ABOVE SEA LEVEL.  
 J DISCONNECT SWITCH PROVIDED BY THE MANUFACTURER.  
 K STARTER PROVIDED BY DIVISION 28 CONTRACTOR.  
 L INTERLOCK MAKEUP AIR UNIT WITH KITCHEN EXHAUST FAN.  
 M PROVIDE UNIT WITH VERTICAL SUPPLY AIR DISCHARGE THROUGH UNITS CURB.

KITCHEN FAN SCHEDULE (OWNER FURNISHED, CONTRACTOR INSTALLED)													
MARK	SECTION	MANUFACTURER	MOUNTING	MODEL	CFM	ESP (IN)	NOM HP	FAN RPM	DRIVE (REL TO DIRECT)	VOLTAGE	PHASE	WEIGHT (LBS)	NOTES
KEF1	KITCHEN	CARTVEAIRE	ROOF	NCA10	3000	1.5	2.00	1210	BELT	208	3	190	A-E

NOTES:  
 A FAN PROVIDE PART OF KITCHEN HOOD BACKPACK.  
 B PROVIDE FACTORY INSTALLED STARTER.  
 C DIVISION 28 CONTRACTOR TO INSTALL DISCONNECT SWITCH FURNISHED LOOSE WITH EXHAUST FAN.  
 D PROVIDE WITH MINIMUM HEIGHT ROOF CURB. ROOF CURB EXTENSION FOR MINIMUM DISCHARGE HEIGHT ABOVE ROOF SURFACE. GREASE TRAP WITH ABSORBENT MATERIAL AND DRAIN CONNECTION, HINGED HOOD ACCESS PORT FOR CLEANING FAN BLADES, AND INTEGRAL MOTOR OVERLOAD PROTECTION.  
 E REFER TO MAU SCHEDULE FOR INTERLOCK.

DUCTLESS SPLIT SYSTEM FAN COIL UNIT SCHEDULE (CONTRACTOR PROVIDED)													
MARK	AREA SERVED	MANUFACTURER	MODEL	REFR TYPE	CFM	TD (MBH)	VOLTS	PH	MCA	MCCP	WEIGHT (LBS)	NOTES	
FCU1	AWELED ELECTRICAL ROOM	MITSUBISHI	PKA35	R410A	120	34.2	208	1	1.0	0.60	50	A-D	

MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND MODEL NUMBERS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.  
 NOTES:  
 A CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF INSULATED REFRIGERANT PIPING. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.  
 B DIVISION 28 CONTRACTOR TO PROVIDE DISCONNECT SWITCH FOR EVAPORATOR.  
 C PROVIDE WITH WALL MOUNTED THERMOSTAT BY MANUFACTURER.  
 D REFER TO PLUMBING DRAWINGS FOR CONDENSATE DETAILS AND INFORMATION.

DUCTLESS SPLIT SYSTEM CONDENSING UNIT SCHEDULE (CONTRACTOR PROVIDED)										
MARK	SERVICE	MANUFACTURER	MODEL	AMBIENT (F)	VOLTS	PH	MCA	MCCP	WEIGHT (LBS)	NOTES
CU1	MITSUBISHI	MITSUBISHI	PKA35	105	208	1	1.0	0.60	50	A-B

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 NOTES:  
 A CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF INSULATED REFRIGERANT PIPING. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.  
 B DIVISION 28 CONTRACTOR TO PROVIDE DISCONNECT SWITCH FOR CONDENSING UNIT.

GRILLE, REGISTER AND DIFFUSER SCHEDULE (CONTRACTOR PROVIDED)										
MARK	MANUFACTURER	MODEL	CONSTRUCTION	FACE TYPE	MOUNTING LOCATION	FACE SIZE (IN)	MAX NC	MAX PRESS (DROP IN W.C.)	DESIGN	NOTES
GR01	TMS	TMS	STEEL	PLAQUE	CEILING	24x24"	30	0.10	B.C.D.E	
GR02	TMS	TMS	STEEL	PERFORATED	CEILING	24x24"	30	0.10	B.C.D.E	
GR03	TMS	OMNI	STEEL	PLAQUE	CEILING	24x24"	30	0.10	B.C.D.E	
GR04	TMS	OMNI	STEEL	PLAQUE	CEILING	12x12"	30	0.10	B.C.D.E	
GR05	TMS	TMS	STEEL	PLAQUE	CEILING	24x24"	30	0.10	A,B,C,D,E	
GR06	TMS	TMS	STEEL	PERFORATED	CEILING	24x24"	30	0.10	A,B,C,D,E,F,H	
GR07	TMS	TMS	STEEL	PLAQUE	CEILING	24x24"	30	0.10	A,B,C,D,E,F,H	

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 NOTES:  
 A 4-WAY THROW PATTERN UNLESS OTHERWISE INDICATED BY FLOW ARROWS ON DRAWINGS.  
 B NECK SIZE SHOWN ON DRAWINGS. PROVIDE ROUND DUCT TO MATCH NECK SIZE UNLESS OTHERWISE SHOWN ON DRAWINGS.  
 C BAKED ENAMEL FINISH. COORDINATE PAINT COLOR WITH ARCHITECT.  
 D FRAME TYPE TO MATCH CEILING WALL CONSTRUCTION, COORDINATE WITH ARCHITECTURAL, REFLECTED CEILING/WALL PLAN.  
 E PROVIDE DIFFUSERS, LINEAR BLOTS, AND GRILLES WITH NO EXPOSED MOUNTING SCREWS.  
 F PROVIDE WITH ADJUSTING OPTIONAL DAMPER.  
 G PROVIDE AS-35 OPTIONAL OPPOSED BLADE DAMPER.  
 H PROVIDE PAK GRILLE WITHOUT 4-WAY DEFLECTOR PATTERN.

OUTSIDE AIR REQUIREMENTS, ASHRAE 62.1-2010 (IP)														
SYSTEM DESIGNATION	SYSTEM TYPE	SYSTEM NAME OR LET SINGLE	SINGLE ZONE SYSTEM ONLY		MULTI-ZONE SYSTEM ONLY		FLOOR AREA SERVED (SF)	SYSTEM AVERAGED AREA (CFM/SF)	SYSTEM POPULATION (PEOPLE)	SYSTEM AVERAGED PEOPLE (CFM/PERSON)	REQUIRED O.A. FLOW (CFM)	REQUIRED O.C.V. ON FLOW (CFM)	DESIGN O.A. FLOW (CFM)	NOTES
			ASSOCIATED VENTILATION ZONE	SINGLE ZONE WORST CASE ZONE AIR DISTRIBUTION EFFECTIVENESS (E)	SYSTEM VENTILATION EFFICIENCY (E <sub>v</sub> )	Worst Case Air Distribution Effectiveness (E <sub>wc</sub> )								
RTU1-ETR	MULTI-ZONE (RTU)	-	-	-	0.93	1.21	120	0.80	10	8.61	177	NA	280	1.2, 4
RTU4-ETR	MULTI-ZONE (RTU)	-	-	-	0.89	1.20	120	0.80	37	7.43	366	NA	400	1.2, 4
RTU7-ETR	MULTI-ZONE (RTU)	-	-	-	1.00	1.20	60	1.20	12	7.60	168	NA	280	1.2, 4
RTU8-ETR	SINGLE ZONE	ARCADÉ	B-80	-	1.00	1.20	60	1.20	47	7.60	168	553	520	1.2, 4

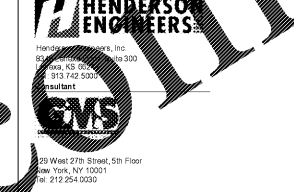
GENERAL NOTES:  
 1. VENTILATION CALCULATIONS BASED ON ASHRAE STANDARD 62.1-2010.  
 2. SYSTEM POPULATIONS BASED ON MAX SEATING AND/OR CODE MAXIMUM VALUES.  
 3. SINGLE ZONE SYSTEMS (Worst Case) SYSTEM VENTILATION EFFICIENCY CALCULATION IS NOT REQUIRED FOR SINGLE ZONE SYSTEMS. WORST CASE AIR DISTRIBUTION EFFECTIVENESS BETWEEN HEATING AND COOLING MODES OF OPERATION IS SHOWN IN TABLE.  
 4. MULTI-ZONE REGRILLATION SYSTEMS: ASHRAE 62.1-2010 CALCULATOR USED TO DETERMINE VENTILATION AIR FLOW IN COMPLIANCE WITH W-10 AND APPENDIX A. VENTILATION RATE SHOWN IS ACTUAL, CALCULATED WITH CORRECTION FACTORS INCLUDED. EACH ZONE IS CALCULATED WITH ITS WORST CASE ZONE AIR DISTRIBUTION EFFECTIVENESS (E<sub>wc</sub>) HEATING/COOLING AS PART OF CALCULATIONS TO FIND E<sub>v</sub>.

CALLISORTKTL  
 A DESIGN CONSULTANCY OF ARCADIS

Callison/RTKL, Inc.  
 1420 7th Ave, Suite 2400  
 Seattle, WA 98101  
 Tel: 206.624.4646

Callison/RTKL Project No: 003-180034-00

Consultant:



Henderson Engineers, Inc.  
 8th Fl., 100 Ave. C  
 313 742 5200  
 Houston, TX

29 West 27th Street, 5th Floor  
 New York, NY 10001  
 Tel: 212 254 1000

BOWLERO - AUGUSTA

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Client/Owner/Project Address

Bowlero | AMP  
 Client Address:  
 222 W 44th Street  
 New York, NY 10036

Project Address:  
 507 Washington Rd  
 Augusta, GA 30607

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Sheet Identification

MECHANICAL SCHEDULES

M-300

NOTE:  
 EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS & SITE VISITS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

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