

E

D

C

B

A

PACKAGED DX ROOFTOP UNIT WITH GAS HEAT SCHEDULE																														
UNIT ID	SERVICE	ARRANGEMENT	SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	SUPPLY FAN				DX COOLING SECTION					MODULATING HOT GAS REHEAT COIL		GAS HEATING SECTION				UNIT DIMENSIONS			FILTER		ELECTRICAL				MODEL NO.	WEIGHT
					MOTOR HP	MOTOR QTY.	ESP (IN WG)	TYPE	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	EER/IEER	COMP QTY	COMP TYPE	CAPACITY (MBH)	AIR		INPUT CAPACITY (MBH)	OUTPUT CAPACITY (MBH)	AIR		LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	TYPE (PRE/FINAL)	VOLTS	PHASE	MCA	MROPD		
															EDB °F	LDB °F			EDB °F	MAX LDB °F										
RTU-1	OUTSIDE AIR	DOWNFLOW	1450	1450	1	1	1.0	BI	100.2	42.7	10.4/19.5	1	INVERTER	38.0	55	80	150	120	0	75.2	10'-10"	5'-4"	5'-6"	2" MERV-8	208	3	36.5	60	62XB08	2010

NOTES:
1. BASIS OF DESIGN: DAIKIN
2. FACTORY NON-FUSED DISCONNECT
3. 2" MERV 8 & 4" MERV 13 IN DRAW THROUGH POSITION
4. 2" INSULATED DOUBLE WALL CONSTRUCTION
5. 12:1 GAS HEATER TURNDOWN, 3/4" CONN.
6. VFD ON SUPPLY AND EXHAUST FANS
7. STAINLESS STEEL DRAIN PAN
8. FIELD POWERED GFI
9. THRU THE BASE SINGLE POINT ELECTRICAL CONNECTION (EXCEPT CONVENIENCE OUTLET)
10. 0-100% COMPARATIVE ENTHALPY ECONOMIZER.
11. 10 YEAR HEAT EXCHANGER WARRANTY
12. HOT GAS REHEAT
13. FLOAT SWITCH IN DRAIN PAN TO DE-ENERGIZE UNIT.
14. ACOUSTICALLY LINED, FULLY INSULATED, SOLID BOTTOM ROOF CURB AT LEAST 14" ABOVE ROOF INSULATION. ACOUSTICAL CURB LINING SHALL CONSIST OF MINIMUM TWO LAYERS OF 2" THICK ACOUSTICAL INSULATION AND FOUR LAYERS OF 0.5" THICK GREEN GYP. BOARD WITH SEALED 18 GA GLAV. STEEL COVER OVER ALL CONFINED AREAS.

15. PREMIUM EFFICIENCY INVERTER DUTY MOTORS
16. R-410A

PLUMBING FIXTURE SCHEDULE											
TAG	BARRIER FREE	ITEM	PIPE CONNECTION SIZES				MANUFACTURER & MODEL NO.	ACCESSORIES			
			WASTE	VENT	CW	HW					
EW-C-1	Y	BI-LEVEL ELECTRIC WATER COOLER	2"	1 1/2"	1 1/2"	-	ELKAY: EZWS-ERPBM28K				
EW-C-2	Y	ELECTRIC WATER COOLER AND BOTTLE FILLING STATION	2"	1 1/2"	1 1/2"	-	ELKAY: EZWSGRN8PK				
FD-1	-	FLOOR DRAIN	3"	1 1/2"	-	-	ZURN: Z-415-B				
FD-2	-	FLOOR DRAIN	3"	1 1/2"	-	-	ZURN: Z-415-PW	TYPE "E" STRAINER AND 4" FUNNEL			
FS-1	-	FLOOR SINK	3"	1 1/2"	-	-	ZURN: Z-1902-K-P				
TD-1	-	TRENCH DRAIN WITH LINT TRAP	3"	-	-	-	JAY. R SMITH: SQ-TD-0203-66				
LAV-1	Y	UNDERMOUNT LAVATORY (HOTEL ROOM)	1 1/2"	1 1/2"	1/2"	1/2"	KOHLER: ARCHER K-2355	FAUCET: KOHLER 99491-CP /DRAIN 7129-A-CP W/GRID STRAINER DRAIN AND CHROME PLATED P-TRAP			
LAV-2	Y	UNDERMOUNT LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	KOHLER: ARCHER K-2355	FAUCET: KOHLER 99491-CP /DRAIN 7129-A-CP W/GRID STRAINER DRAIN AND CHROME PLATED P-TRAP			
LAV-3	Y	WALL MOUNTED LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	KOHLER: SOHO K-2084-0	FAUCET: KOHLER 99491-CP /DRAIN 7129-A-CP W/GRID STRAINER DRAIN AND CHROME PLATED P-TRAP			
BT-1	Y	BATHTUB/SHOWER (HOTEL ROOM)	2"	1-1/2"	1/2"	1/2"	STERLING: 7112 ENSEMBLE WITH DELTA 52003 WITH T13420 SHOWER TRIM AND R10000-UNWVS VALVE	60"x32" ADA COMPLIANT TUB/SHOWER UNIT; WITH 1.5 GPM SHOWER HEAD, ARM AND FLANGE, DIVERTER FOR DUAL SHOWERS, AND HANDHELD WAND WITH STAINLESS STEEL HOSE AND 36" SLIDE/GRAB BAR. PRESSURE BALANCED MIXING VALVE SHALL MEET ASSE 1016 AND HAVE UNIVERSAL INLETS/OUTLETS AND SUPPLY STOPS.			
SS-1	-	SERVICE SINK	3"	1 1/2"	3/4"	3/4"	FIAT: MSB-2424	FAUCET: FIAT # 830-AA W/VACUUM BREAKER, STAINLESS STEEL GRID STRAINER, PAIL HOOK AND HOSE THREAD, HOSE AND MOP HANGERS.			
UR-1	Y	WALL MOUNTED URINAL	2"	1 1/2"	3/4"	-	KOHLER: BARDON SUPERIOR K-4960-ET	FLUSH VA: CARRIER:			
WC-1	Y	WATER CLOSET - FLUSH TANK, FLOOR MOUNTED	3"	1-1/2"	3/4"	-	KOHLER: K-25077-SSRA	ADA, VITREOUS CHINA, FLOOR MOUNTED, FLUSH TANK, 12" ROUGH IN, ANTIMICROBIAL FINISH; PROVIDE WITH OPEN FRONT SEAT; 1.28 GPF			
WM-1	-	WASHING MACHINE OUTLET BOX	3"	1 1/2"	1/2"	1/2"	IPS: GUY GRAY T SERIES				

- NOTES:
1. SUPPLY ALL FIXTURES WITH LOOSE KEY STOPS.
2. PROVIDE ALL ACCESSORIES NECESSARY FOR COMPLETE AND OPERABLE INSTALLATION.
3. PROVIDE CARRIERS FOR ALL FIXTURES PER MANUFACTURER'S RECOMMENDATIONS.
4. WHERE REQUIRED AND WHERE DESIGNATED, FIXTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE TO THE LATEST EDITION OF "THE BARRIER" FREE DESIGN REQUIREMENTS OF THE STATES CONSTRUCTION CODE.
5. ALL FIXTURES SHALL MEET MICHIGAN DEPT. OF PUBLIC HEALTH REQUIREMENTS, AND SHALL BE SUITABLE FOR FOOD PREPARATION AREAS.
6. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATION/MOUNTING HEIGHT OF ALL FIXTURES.

SINGLE ZONE COOLING ONLY DX SPLIT SYSTEM SCHEDULE																								
INSIDE MARK	AREA SERVED	SUP PLY CFM	OA CFM	ESP	RATED CLG CAP					FAN COIL ELECTRICAL					FCU MODEL NO.	OUTSIDE TAG	NOM. TONS	MINIM UM SEER	CONDENSING UNIT ELECTRICAL					CU MODEL NO.
					MBH	MCA	FAN FLA	MTR W	V	PH	MCA	MOCP	FUSE	V					PH					
IDU-1	ELEVATOR EQUIPMENT	530	NOT REQ.	N/A	12	1.0	0.33	30	208	1	PKA-A1 2HA6	ODU-1	1.0	15.2	13	15	15	208	1	PUY-A12NHA6				
IDU-2	PBX	530	NOT REQ.	N/A	12	1.0	0.33	30	208	1	PKA-A1 2HA6	ODU-2	1.0	15.2	13	15	15	208	1	PUY-A12NHA6				

- NOTES:
1. BASIS OF DESIGN: MITSUBISHI.
2. INVERTER DRIVEN COMPRESSOR
3. INTEGRAL, UNIT POWERED CONDENSATE PUMP: 27" LIFT.
4. INDOOR UNITS RECEIVE POWER FROM OUTDOOR UNITS THROUGH FIELD SUPPLIED INTERCONNECTED COPPER WIRING BY DIV. 26.
5. WIRED LOW VOLTAGE WALL MTD THERMOSTAT.
6. UNIT/SYSTEM EFFICIENCIES MUST EXCEED ASHRAE 90.1-2007.
7. DISCONNECTS (INDOOR AND OUTDOOR) BY DIV. 26
8. PROVIDE INDOOR AND OUTDOOR COMPONENTS FULLY CHARGED WITH R410A REFRIGERANT AND INTERCONNECTING REFRIGERANT PIPING FOR FIELD INSTALLATION.
9. PROVIDE INTERCONNECTING CONTROL WIRING RAN IN CONDUIT.
10. AIR FILTER IN INDOOR UNIT
11. LIMITED WARRANTY: FIVE YEAR PARTS AND SEVEN YEARS COMPRESSOR

THERMOSTATIC MIXING VALVE SCHEDULE

UNIT ID	SYSTEM SERVED	MIN. FLOW (GPM)	MAX. FLOW (GPM)	PRESS. DROP AT MAX. FLOW (PSIG)	REQ. FLOW (GPM)	MANUFACTURER/ MODEL NO.	REMARKS
TMV-1	DOM. HOT WATER	1	85	20	68	POWERS / LFSH1434	

NOTES:

LOUVER SCHEDULE

UNIT ID	CFM	MAX FREE AREA VELOCITY (FPM)	MAX PD (IN. W.G.)	FACE SIZE (IN)	MIN. SQ. FT. FREE AREA	MOUNTING	MATERIAL	TYPE	MODEL NO.	SERVES
EL-1	150	--	-	14x12	0.36	SIDEWALL	ALUMINUM	DRAINABLE	ESD-435	FIRE PUMP ROOM VENTILATION
EL-2	225	750	.06	14x12	0.36	SIDEWALL	ALUMINUM	DRAINABLE	ESD-435	PANTRY EXHAUST
EL-3	225	750	.06	14x12	0.36	SIDEWALL	ALUMINUM	DRAINABLE	ESD-435	GENERAL (ADMIN) EXHAUST
EL-5	-	-	-	14x12	-	SIDEWALL	ALUMINUM	DRAINABLE	ESD-435	GENERAL RESTROOM EXHAUST
EL-6	700	-	-	24x24	-	SIDEWALL	ALUMINUM	DRAINABLE	ESD-435	POOL ROOM EXHAUST
EL-7	225	750	.06	14x12	0.36	SIDEWALL	ALUMINUM	DRAINABLE	ESD-435	1ST FLR RESIDENTIAL EXHAUST
IL-1	-	-	-	36x24	3.42	SIDEWALL	ALUMINUM	DRAINABLE	ESD-435	DRYER MAKE-UP
IL-2	60 OA 650 COND	BY PTAC MFG	BY PTAC MFG	26x32	BY PTAC MFG	SIDEWALL	ALUMINUM	STATIONARY	FRIEDRICH VPSC2	VTAC

- TYPICAL ACCESSORIES:
1. EXHAUST LOUVERS: AMCA LEAKAGE CERTIFIED BACKDRAFT DAMPER.
2. IL-1: LOW LEAK MOTOR OPERATED DAMPER WITH END SWITCH.
3. 1/2" ALUMINUM BIRD SCREEN.
4. COLOR TO MATCH BUILDING. FACTORY KYNAR FINISH BY ARCHITECT. SUBMIT WITH COLOR SAMPLE FOR ARCHITECTURAL REVIEW. COORDINATE INSTALLATION DETAILS AND ACCESSORIES WITH ARCHITECT.

- NOTES:
1. BASIS OF DESIGN: GREENHECK UNO, FURNISHED AND INSTALLED BY MC.
2. LOUVER SHALL BE DESIGNED TO PREVENT MOISTURE CARRYOVER BELOW 1000 FPM.
3. PROVIDE ALL ALUMINUM CONSTRUCTION.
4. REFER TO ARCHITECTURAL PLANS FOR MOUNTING REQUIREMENTS.
5. PROVIDE MISC. MOUNTING HARDWARE

BOOSTER PUMP SCHEDULE

UNIT ID	SERVICE	TYPE	NUMBER OF PUMPS	FLOW PER PUMP (GPM)	SUCTION PRESSURE	HEAD (FT)	SUCTION & DISCHARGE SIZE	MIN % EFF	ELECTRICAL						DISCONNECT		CONTROLLER			MANUFACTURER/ MODEL NO.	REMARKS
									HP	RPM	VOLTS	PHASE	MOTOR FLA	PANEL FLA	FURN. BY	INST. BY	TYPE	FURN. BY	INST. BY		
BP-1	DOMESTIC WATER	DUPLEX	2	133.7	30	123	4"	73	2x7.5	3450	208/240	3	20.0	41	26	26	VDF	23	23	GRUNDFOS HYDRO MPC-E 2CRE 32- - 3X20	

DOMESTIC WATER HEATER SCHEDULE (TANKLESS GAS)

UNIT ID	LOCATION/ AREA SERVED	CAPACITY		FUEL TYPE	GAS PRESS MIN - MAX (IN WG)	INPUT (MBH)	THERMAL EFFICIENCY	HEAT EXCHANGER MATERIAL	VENTING			ELECTRICAL				DISCONNECT			WEIGHT (LBS)	MANUFACTURER/ MODEL NO.	REMARKS
		FLOW (GPM)	TEMP RISE (°F)						SIZE (IN)	MATERIAL	MAX. LENGTH (FT)	MOCP	FLA	VOLTS	PH	FURN. BY	INST. BY	TYPE			
DWH-1	MECHANICAL ROOM	34.3	100	GAS	4.0 - 14	1060	96%	STAINLESS STEEL	6	PER LOCAL CODE	100	20	11	120	1	26	26	TOG	1190	AERCO / INN 1060	
DWH-2	MECHANICAL ROOM		100	GAS	4.0 - 14	1060	96%	STAINLESS STELL	6	PER LOCAL CODE	100	20	11	121	1	26	26	TOG	1190	AERCO / INN 1060	

NOTES:

1. HYDROPNEUMATIC TANK.

OUTDOOR POOL DEHUMIDIFICATION UNIT SCHEDULE

UNIT ID	SUPPLY						DX COOLING COIL						CONDENSER			HOT GAS REHEAT SECTION		NAT. GAS PREHEAT			ELECTRICAL					MODEL	WEIGHT	REMARKS
	CFM	OA	BLOWE R TYPE	ESP	HP	FLA	TOTAL CAPACITY (MBH)	SENSIBL E CAPACIT Y (MBH)	LATENT CAPACIT Y	COMP. TYPE	COMP. QTY	RLA/LRA	QTY	HP	FLA	CAP (MBH)	CONTROL	INPUT (MBH)	OUT (MBH)	TURN DOWN	V	PH	FLA	MC A	MOCP			
PDU-1	1200	650	BI PLENUM	1.25	2	7.5	58.5	38.0	20.5	MODULATING	1	/16.1	1	1/3	2.8	14	MODULATING	100	81	8.3:1	208	3	26	30	45	RQ-004	972	

- NOTES:
1. BASIS OF DESIGN: AAON. ROOM CONDITIONS 84F DB/55% RH. 90F WATER TEMP.
2. TWO INCH DOUBLE WALLED CABINET.
3. R-410A.
4. UNIT MTD. NON-FUSED DISCONNECT.
5. OUTDOOR AIR. OPERATED DAMPER AND FILTER.
6. MODULATING GAS HEAT.
7. PACKAGED INTEGRAL AIR-COOLED AIR CONDITIONING.
8. ROOF CURB

PUMP SCHEDULE

UNIT ID	SYSTEM SERVED	TYPE	FLOW (GPM)	HEAD (FT)				DISCONNECT		STARTER			MANUFACTURER/ MODEL NO.	REMARKS
					HP	VOLTS	PHASE	FURN. BY	INST. BY	TYPE	FURN. BY	INST. BY		
P-1	DOMESTIC HOT WATER RETURN	INLINE	28	50	1 1/2	208	3	E	E	HOA	M	E	B&G	LEAD FREE

NOTES:

1. PERFORMANCE BASED ON WATER, UNLESS OTHERWISE INDICATED.

SUMP PUMP SCHEDULE

UNIT ID	SYSTEM SERVED	TYPE	NUMBER OF PUMPS	FLOW PER PUMP (GPM)	HEAD (FT)	SUMP BASIN		ELECTRICAL			DISCONNECT			CONTROL			MANUFACTURER/ MODEL NO.	REMARKS
						SIZE (IN)	DEPTH (IN)	HP	VOLTS	PHASE	FURN. BY	INST. BY	TYPE	TYPE	FURN. BY	INST. BY		
SP-1	ELEVATOR	SUBMERSIBLE	1	50	20	18x18	30	.5	120	1	E	E	SWITCH	NOTE 1	M	E	B&G: 1EC0511	

NOTES:

1. SIMPLEX PUMP CONTROL PANEL WITH AUDIBLE/VISUAL ALARM AND TWO FLOATS (ON/OFF AND HIGH WATER).



STUCKY VITALE ARCHITECTS
27172 WOODWARD AVENUE
ROYAL OAK, MI 48067-0925
P. 248.546.6700
F. 248.546.8454
WWW.STUCKYVITALE.COM

STATEMENT OF INTELLECTUAL PROPERTY:
THE IDEAS, CONCEPTS, DRAWINGS AND THOUGHTS CONVEYED HEREIN ARE THE INTELLECTUAL PROPERTY OF STUCKY VITALE ARCHITECTS. THIS SET OF DRAWINGS, IN WHOLE OR IN PART, MAY NOT BE REPRODUCED, WITHOUT THE WRITTEN CONSENT OF STUCKY VITALE ARCHITECTS. THIS INFORMATION IS PROTECTED UNDER U.S. COPYRIGHT LAW. ALL RIGHTS RESERVED

Consultants:

