

ROOFTOP UNIT SCHEDULE																		
ID	LOCATION	SERVES	SUPPLY		MIN. OUTDOOR		ESP		MOTOR		HEATING		HEATING		HEATING		REMARKS	
			FAN CFM	DRIVE	AIR CFM	IN WG	IN WG	HP	VOLTS/PH	MEDIUM	INPUT	OUTPUT	COOLING	GROSS COOL	SENS. COOL	FILTER		FILTER
RTU-1	ROOF	SALES FLOOR	8,000	DIRECT	2,450	1.5	7.5	208/3	GAS	540.0	432.0	R-410A	287.1	160.1	14X20X2 - 9	MERV 8	FLO-25E-MPU-ACCO2-NG-10-V02-12	(1)(2)(3)(4)(5)(6)(10)
RTU-2	ROOF	OFFICE AREA	600	DIRECT	150	0.5	1/4	208/1	GAS	65.0	52.0	R-410A	24.6	24.0	14X20X2 - 4	MERV 13	LENNOX / KGB02454E	(7)(8)(9)

- PROVIDE 14" HIGH INSULATED ROOF CURB & 3/4" BURGLAR BARS ON SUPPLY AND RETURN OPENINGS. RTU-1 ROOF CURB IS BY AES INDUSTRIES CONTACT GEORGE LASHER T(800)786-0402 X 216. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PURCHASING THE ROOF CURB DIRECTLY FROM AES INDUSTRIES.
- PROVIDE WITH THROUGH THE BASE SINGLE POINT ELECTRICAL CONNECTION, DISCONNECT, VFD 2-SPEED OPERATION, OA HOOD, PROOF AIRFLOW SWITCH, CLOGGED FILTER SWITCH, STAINLESS STEEL DRAIN PAN, 120V CONVENIENCE OUTLET, CO2 HEAT RECLAIM COIL, & DEHUMIDIFICATION CONTROL.
- UNIT SUPPLIED BY OWNER, RECEIVED, RIGGED AND INSTALLED BY MECHANICAL CONTRACTOR.
- ROOFTOP UNIT CONTROLLER IS FACTORY INSTALLED IN THE FLO ENERGY SYSTEMS MULTI-PATH MPU. SPACE TEMPERATURE, SUPPLY AIR TEMPERATURE & SPACE HUMIDITY SENSORS ARE SUPPLIED BY CD CONTROLS AND SHIPPED TO REFRIGERATION CONTRACTOR FOR FIELD INSTALLATION.
- FLO ENERGY SYSTEMS MULTI-PATH MPU IS MANUFACTURED BY AAOIN INC. (PRODUCTION 10 - 12 WEEKS) TO COORDINATE MPU SHIPPING OR FOR TECHNICAL SUPPORT CONTACT FLO ENERGY SYSTEMS T(866)706-2647 x222. ALDIORDERS@SYSTEMSFLO.COM
- MECHANICAL CONTRACTOR TO REVIEW AND CONFIRM RTU SETPOINTS/STORE HOURS WITH ALDI DIRECTOR OR REAL ESTATE AND SIEMENS ENERGY MANAGEMENT USER GUIDE.
- PROVIDE WITH GLOBAL ECONOMIZER SECTION AND BAROMETRIC RELIEF DAMPERS.
- ALDI HAS A NATIONAL ACCOUNT WITH LENNOX INDUSTRIES. ALL LENNOX HVAC EQUIPMENT SHOULD BE QUOTED AND ORDERED THROUGH LENNOX NATIONAL ACCOUNTS. PLEASE CALL 800-367-6285 AND HIT "1" FOR SALES AND ASK FOR THE ALDI'S NATIONAL ACCOUNT SALES ADMINISTRATOR WHO WILL ASSIST YOU WITH QUOTES, AVAILABILITY AND ORDERS.
- PROVIDE 14" HIGH INSULATED ROOF CURB & 3/4" BURGLAR BARS ON SUPPLY AND RETURN OPENINGS. FIELD VERIFY LOCATION.
- IAQ IONIZATION UNIT, 02 PRIME 02P-1C / 02P-4B, FURNISHED BY ALDI AND INSTALLED BY REFRIGERATION CONTRACTOR.

DUCTLESS SPLIT FAN COIL UNIT SCHEDULE																
ID	LOCATION	SERVES	SUPPLY FAN				COOLING COIL				HEATING COIL				REMARKS	
			FAN CFM	MIN. OUTDOOR	ESP	FAN	MOTOR	MOTOR	TOTAL CAPACITY	SENS. CAPACITY	MEDIUM	CAPACITY	FILTER	FILTER		MFG / MODEL
FCU-1	OFFICE	OFFICE	300	30	-	-	-	208/1	9,000	-	R-410A	10,400	-	MERV 8	LG / LCN098HV4	(1)(2)(3)(4)(5)

- DUCTLESS SPLIT FAN COIL UNIT SHALL BE ORDERED, RECEIVED AND INSTALLED BY THE CONTRACTOR. THE EQUIPMENT COST SHALL BE BILLED DIRECTLY TO ALDI. FOR ORDERING INFO CONTACT BRYON JESSE AT ALDIORDERS@MEIERSUPPLY.COM OR BY PHONE 607-797-7700.
- PROVIDE WITH DRY CONTACT PDRYCB300 (INSTALLED BY REFRIGERATION CONTRACTOR) FOR INTEGRATION WITH SIEMENS BMS. CONTROLLED BY WALL MOUNTED TEMPERATURE SENSOR PROVIDED BY SIEMENS AND INSTALLED BY THE REFRIGERATION CONTRACTOR. REFER TO DRAWING EMS-1 FOR DETAILS.
- COORDINATE REFRIGERANT LINE SIZING PER MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE WITH MATCHING AIR COOLED HEAT PUMP SCHEDULED.
- PROVIDE VENTILATION KIT PTVK430, INLINE BOOSTER FAN (\$8P USA TD100), CASSETTE GRILLE & CONDENSATE PUMP. INLINE BOOSTER FAN TO BE INSTALLED BY THE MECHANICAL CONTRACTOR. POWER WIRING BY THE ELECTRICIAN. CONTROL RELAY AND WIRING BY REFRIGERATION CONTRACTOR. INLINE BOOSTER FAN SHALL RUN WHEN THE FAN COIL UNIT OPERATES.

AIR COOLED HEAT PUMP SCHEDULE																
ID	LOCATION	SERVES	TOTAL COOLING		OUTDOOR TEMP		TOTAL HEATING		COMPRESSORS		REFRIGERANT		CONDENSER FAN		REMARKS	
			CAPACITY MBH	DB	CAPACITY MBH	REFRIGERANT	NUMBER	SEER	CIRCUITS	NUMBER	VOLTS/PH	MCA	MOCF	MFG / MODEL		
HP-1	UTILITY AREA	FCU-1	9.9	95	12.1	R-410A	1	20.2	1	208/1	14.3	20.0	LG / LUU097HV	(1)(2)		

- DUCTLESS SPLIT FAN COIL UNIT SHALL BE ORDERED, RECEIVED AND INSTALLED BY THE CONTRACTOR. THE EQUIPMENT COST SHALL BE BILLED DIRECTLY TO ALDI. FOR ORDERING INFO CONTACT BRYON JESSE AT ALDIORDERS@MEIERSUPPLY.COM OR BY PHONE 607-797-7700.
- PROVIDE WITH MATCHING DUCTLESS SPLIT FAN COIL.

VENTILATION RATE SCHEDULE												
INTERNATIONAL MECHANICAL CODE 2015 - TABLE 403.3 - SUPERMARKETS												
ROOM NUMBER	ROOM NAME	IMC CATEGORY	GROSS AREA (SQ. FT.)	OCCUPANTS PER 1000 SQ. FT.	TOTAL OCCUPANTS	CFM PER PERSON	CFM PER SQ. FT.	VENTILATION EFFECTIVENESS	REQ'D OA (CFM)	REQ'D EXHAUST (CFM)	EXHAUST PROVIDED (CFM)	
101,102	SALES/VESTIBULE	SUPERMARKET	13,303	8	106	7.5	0.06	0.80	1995	-	-	
103	UNISEX 1	TOILET RM.	116	-	-	-	50 ⁽¹⁾	0.80	-	100	150	
104	HALL	CORRIDOR	188	-	-	-	0.06	0.80	14	-	-	
105	UNISEX 2	TOILET RM.	116	-	-	-	50 ⁽¹⁾	0.80	-	100	150	
106	BREAK ROOM	CONFERENCE	272	50	14	5.0	0.06	0.80	20	-	180	
107	OFFICE	OFFICE SPACE	231	5	1	5.0	0.06	0.80	17	-	-	
108,109	BACK ROOM	WAREHOUSE	7,659	-	-	-	0.06	0.80	574	-	1700	
110	eCOMMERCE	OFFICE SPACE	235	5	1	5.0	0.06	0.80	18	-	-	
TOTAL OA REQUIRED:									2,622	TOTAL EA:	2,180	
TOTAL OA PROVIDED:									2,630			

- RATE PER WATER CLOSET/URINAL WITH EXHAUST OPERATING CONTINUOUSLY DURING OCCUPIED HOURS.

EXHAUST AND DESTRATIFICATION FAN SCHEDULE											
ID	SERVES	LOCATION	TYPE	DRIVE	CFM	EXT SP		HP	VOLTAGE	MFG / MODEL	REMARKS
						IN. WG.	RPM				
EF-1	BREAK ROOM	ROOF	CENT.	DIRECT	180	0.25	1,319	1/30	120/1	GREENHECK / G-070-D	(1)(2)(3)
EF-2	BACKROOM	ROOF	CENT.	DIRECT	1,700	0.4	1,633	1/4	120/1	GREENHECK / G-100-A	(2)(3)(4)
EF-3	TOILET	ROOF	CENT.	DIRECT	300	0.4	1,519	1/20	120/1	GREENHECK / G-080-D	(2)(3)(4)
DF-1	SALES FLOOR	ROOF JOIST	CENT.	DIRECT	1,061	-	1,550	31 W	120/1	AIR-ROW / F-18	(5)(6)(7)
DF-2	SALES FLOOR	ROOF JOIST	CENT.	DIRECT	1,061	-	1,550	31 W	120/1	AIR-ROW / F-18	(5)(6)(7)
DF-3	SALES FLOOR	ROOF JOIST	CENT.	DIRECT	1,061	-	1,550	31 W	120/1	AIR-ROW / F-18	(5)(6)(7)

- CONTROLLED FROM WALL SWITCH PROVIDED AND WIRED BY DIVISION 26.
- PROVIDE SPEED CONTROLLER MOUNTED ON EXHAUST DUCT ABOVE CEILING.
- PROVIDE WITH 14" HIGH INSULATED ROOF CURB, DAMPER TRAY AND BACKDRAFT DAMPER.
- CONTROLLED BY SIEMENS ENERGY MANAGEMENT SYSTEM.
- FAN PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR. CONTACT RAY MIERENS @ FRESHERSOURCE ENERGY SOLUTIONS (416) 544-8008. SUPPORT FAN FROM BUILDING STRUCTURE WITH BEAM CLAMPS AND AIRCRAFT CABLE. INSTALL AT 1'-0" BELOW ROOF DECK AND PER MANUFACTURER'S RECOMMENDATIONS.
- FAN SHALL RUN CONTINUOUSLY. WIRING PROVIDED BY DIVISION 26. FACTORY SHALL PRESET FAN SPEED TO MAXIMUM.
- FAN TO BE FACTORY PAINTED TO MATCH BUILDING STRUCTURE. NO MANUFACTURER SUBSTITUTIONS.

GAS FIRED UNIT HEATER SCHEDULE											
ID	LOCATION	TYPE	MBH		CFM		HP	VOLTAGE	FLA/MOCF	MFG/MODEL	REMARKS
			MBH	CFM	HP	VOLTAGE					
UH-1	BACKROOM	POWER VENT	75	62.5	1200	1/15	115/1	2/15	LENNOX / LF25-075A	(1)	
UH-2	BACKROOM	POWER VENT	75	62.5	1200	1/15	115/1	2/15	LENNOX / LF25-075A	(1)	

- CONTROLLED BY THE SIEMENS ENERGY MANAGEMENT SYSTEM. THE TEMPERATURE SETPOINT SHALL BE 60°F.

DIFFUSER/REGISTER/GRILLE SCHEDULE											
ID	SERVES	TYPE	FACE		NECK		MATERIAL	MAX MOUNTING	NC	MFG/MODEL	REMARKS
			SIZE	SIZE	SIZE	SIZE					
D-1	SUPPLY	DIFFUSER	24X24	SEE PLANS	8"Ø	8"Ø	STEEL	T-BAR	20	PRICE / SCDA	(1)
D-2	SUPPLY	JET-SLOT	48X4	8"Ø	8"Ø	8"Ø	STEEL	T-BAR	20	PRICE / JS210	(2)(4)
R-1	RETURN	PERF.	24X24	12X12			STEEL	T-BAR	20	PRICE / PDDR	(1)
R-2	SUPPLY	REGISTER	12X6	12X6			ALUMINUM	DUCT	20	PRICE / SDGE	(2)(3)
R-3	RETURN	GRILLE	48X24	48X12			STEEL	GWB	20	PRICE / S10Z	(2)
R-4	TRANSFER	GRILLE	48X12	48X12			STEEL	GWB	20	PRICE / S30	(2)
R-5	SUPPLY	GRILLE	12X8	12X8			STEEL	GWB	20	PRICE / S10L	(2)
E-1	EXHAUST	PERF.	12X12	10X10			STEEL	T-BAR	20	PRICE / PDDR	(1)

- COORDINATE CEILING TYPE WITH ARCHITECTURAL CEILING PLAN.
- PROVIDE PRIMED FINISH. AIR DEVICE TO BE PAINTED IN THE FIELD.
- PROVIDE WITH BLADES PARALLEL TO THE SHORT DIMENSION. AIR SCOOP AND CABLE OPERATOR.
- PROVIDE WITH ONE (1) 1" SLOT, 24" TALL INTERNALLY INSULATED PLENUM, VOLUME DAMPER & CABLE OPERATOR.

SYMBOLS & ABBREVIATIONS			
	DUCT UP		12X12 SHEETMETAL ACCESS DOOR
	DUCT DOWN		FIRE DAMPER WITH ACCESS DOOR
	DIGITAL ZONE SENSOR		ROUND CONCENTRIC TAKEOFF
	HUMIDISTAT		BELL MOUTH TAKEOFF
	FLAT PLATE TEMPERATURE SENSOR		BOD BOTTOM OF DUCT
	SMOKE DUCT DETECTOR		EF EXHAUST FAN
	DISCHARGE AIR TEMPERATURE SENSOR		RTU ROOFTOP UNIT
	SINGLE BLADE VOLUME DAMPER		UH UNIT HEATER
	OPPOSED BLADE VOLUME DAMPER		FCU FAN COIL UNIT
	DUCTWORK WITH 1" INTERNAL LINING		HP AIR COOLED HEAT PUMP

DUCT SMOKE DETECTOR SYSTEM SPECIFICATION

DUCT DETECTOR SHALL BE SYSTEM SENSOR MODEL D4120 SERIES DUCT TYPE. PHOTOELECTRIC, 120VOLT OPERATION, 4 WIRE, WITH APPROPRIATE SYSTEM SENSOR MODEL SAMPLING TUBES PER MANUFACTURER'S INSTRUCTIONS. REMOTE KEYPED TEST/RESET STATION SHALL BE SYSTEM SENSOR MODEL RTS151KEY OR RTS2 WITH POWER AND ALARM INDICATORS. MECHANICAL CONTRACTOR SHALL PROVIDE, INSTALL, AND WIRE THE DUCT MOUNTED SMOKE DETECTOR AND REMOTE TEST/RESET STATION.

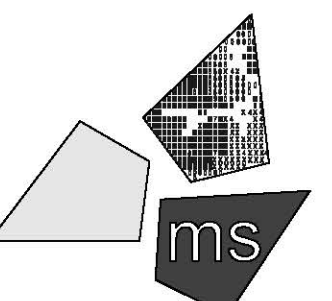
GENERAL HVAC NOTES:

- COORDINATE DIFFUSER LOCATIONS WITH REFLECTED CEILING PLAN INCLUDING LIGHTS AND SPRINKLER HEAD LAYOUTS.
- PROVIDE DUCT MOUNTED SMOKE DETECTORS IN RETURN AIR DUCTS AS INDICATED ON THE HVAC FLOOR PLAN. DUCT DETECTORS AND REMOTE TEST/RESET STATIONS SHALL BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR AND WIRED BY THE ELECTRICAL CONTRACTOR PER THE MANUFACTURER'S INSTRUCTIONS. THE FIRE ALARM CONTRACTOR IS RESPONSIBLE ONLY FOR CONNECTING THE BUILDING FIRE ALARM SYSTEM TO THE DUCT DETECTOR'S ALARM & SUPERVISORY CONTACTS WHEN REQUIRED.
- COORDINATE DUCTWORK MOUNTING HEIGHT AND LOCATION WITH STRUCTURAL STEEL AND LIGHTS. MOUNT DUCTWORK AS HIGH AS POSSIBLE.
- TEMPERATURE AND HUMIDITY SENSORS ARE SHOWN FOR REFERENCE ONLY. AN ENERGY MANAGEMENT SYSTEM IS BEING PROVIDED, BY SIEMENS, UNDER A SEPARATE CONTRACT BY THE OWNER. THE EMS SHALL BE INSTALLED BY THE REFRIGERATION CONTRACTOR AND THE MECHANICAL CONTRACTOR SHALL COORDINATE WORK WITH THE ALDI PROJECT MANAGER, SIEMENS PROJECT MANAGER (PH: 512-803-3169) AND REFRIGERATION CONTRACTOR. REFERENCE THE SIEMENS EMS DRAWINGS LOCATED ON THE SHARENOLOGY.COM WEBSITE IN THE VENDOR INFORMATION FOLDER.
- ALL DUCT DIMENSIONS REPRESENT FREE AREA.
- ALL MITERED ELBOWS & FITTINGS TO BE PROVIDED WITH TURNING VANES.
- ALL ROUND DUCTWORK SHALL BE SPIRAL ONLY.
- PROVIDE VOLUME DAMPERS AT ALL RETURN REGISTER TAKEOFFS.
- MAXIMUM FLEX DUCT LENGTH SHALL BE 4FT. FLEX DUCT ALLOWED ONLY ON CONCEALED DUCTWORK INSTALLED ABOVE A CEILING.
- FIELD VERIFY ALL NEW EQUIPMENT AND SCOPE OF WORK PRIOR TO BIDDING. NOTIFY OWNER IN WRITING 48 HOURS PRIOR TO BID DATE OF ANY QUESTIONS ON SCOPE OF WORK OR CONTRACT DOCUMENTS.
- PROVIDE 1 1/2" PVC CONDENSATE DRAIN & P-TRAP FOR ALL ROOFTOP UNITS.
- PROVIDE ACOUSTICAL INSULATION INSIDE ROOFTOP UNIT CURB FOR SOUND ATTENUATION. (TYPICAL)
- INSULATE ALL DUCTWORK CONCEALED ABOVE A CEILING AND EXPOSED IN THE BACK ROOM. SEE SPECIFICATION SECTION 230700 - HVAC INSULATION FOR DETAILS.

Issued:	Date:
Client Review Set	11/04/22
Permit Set	11/16/22
Bid Set	01/04/23
Construction Set	02/15/23
Revisions:	Date:
Bid Addendum No 1	01/13/23

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ms consultants, inc.
engineers, architects, planners
2221 Schrock Road
Columbus, Ohio 43229-1547
phone 614.898.7100
fax 614.898.7570

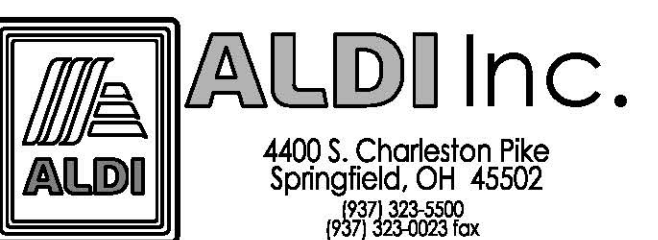
DRAWN BY: NDH

REVIEWED BY: KFF

Seal

FOR CONSTRUCTION
REC. 2/24/23
DCC/JW

PROFESSIONAL OF RECORD:
MICHAEL R. MORELLI No. 77471
EXP. DATE: 12/31/2023



ALDI Inc. Store #: 86
Liberty Township
5418 Liberty-Fairfield Road
Liberty Twp, OH 45011
Butler County
Project Name & Location:

HVAC Schedules,
Symbols & Notes
Drawing Name:

Prototype Rls. 08/29/22
Project No. 40507-04

Type: Inline

Scale: As Noted
Drawing No. H-001

