

**SMITH'S RTU NOTES:**

- 14" INSULATED RTU CURBS / ADAPTORS ARE M.C. PROVIDED / INSTALLED. EXISTING MODEL NUMBERS PROVIDED FOR ADAPTORS IN RTU SCHEDULE. SEE SPEC DIVISION 7 FOR MANUFACTURED CURB INFO
- PROVIDED WITH DRY BULB ECONOMIZER WITH BAROMETRIC RELIEF (FIELD INSTALLED BY M.C.)
- PROVIDED WITH NON-FUSED DISCONNECT SWITCH (INSTALLED BY E.C.)
- E.C. TO PROVIDE / INSTALL 115V CONVENIENCE OUTLET
- PROVIDED WITH SUPPLY-SIDE SMOKE DETECTOR (DUCT CONNECTIONS BY M.C.)
- DIVISION 28 TO PROVIDE CONNECTIONS BETWEEN SMOKE DETECTORS AND ENERGY MANAGEMENT SYSTEM. UNIT TO SHUT DOWN UPON SMOKE DETECTOR ACTIVATION
- DIVISION 28 TO PROVIDE DIGITAL SPACE SENSORS / CONNECTIONS TO EMS
- PROVIDE EACH RTU WITH 1 EXTRA SET OF FILTERS
- PROVIDE CONDENSATE DRAIN WITH MINIMUM 3" DEEP TRAP. M.C. TO DROP CONDENSATE PIPING INTO JOIST SPACE FOR CONNECTIONS BY P.C.
- RETURN AIR / OUTSIDE AIR SENSORS ARE FACTORY INSTALLED
- MC SHALL ENGAGE A FACTORY-PROVIDED SERVICE REPRESENTATIVE TO INSPECT, TEST, AND ADJUST RTUS AND COMPONENTS TO ENSURE PROPER INSTALLATION.
- MANUFACTURER-PROVIDED SERVICE REPRESENTATIVE SHALL BE REQUIRED TO INSPECT EACH RTU AS IT IS POWERED W/ THE UNDERSTANDING THAT EACH RTU MAY BE POWERED AT DIFFERENT TIMES REQUIRING MULTIPLE SITE VISITS FOR EQUIPMENT INSPECTIONS.
- MANUFACTURER-PROVIDED SERVICE REPRESENTATIVE SHALL PROVIDE THE OWNER / G.C. WITH WRITTEN DOCUMENTATION THAT ALL INSTALLATIONS ARE COMPLETE AND ACCURATE PER MANUF. STANDARDS. REFER TO SPEC 237413 FOR ADDITIONAL REQUIREMENTS.

**TEST & BALANCING PROCEDURES / REQUIREMENTS:**

- ALL TESTING / BALANCING SHALL ADHERE TO AABC (6TH EDITION) OR NEBB (7TH EDITION).
- BEFORE BALANCING, ALL PRESSURE TEST (DUCT LEAKAGE) OF DUCT AND PIPING SYSTEMS MUST BE COMPLETE AND ACCEPTABLE.
- OBTAIN AS-BUILT DESIGN DRAWINGS AND SPECIFICATIONS, AND BECOME THOROUGHLY ACQUAINTED WITH THE DESIGN INTENT.
- OBTAIN COPIES OF APPROVED SHOP DRAWINGS OF ALL AIR HANDLING EQUIPMENT, OUTLETS, AND TEMPERATURE CONTROL DIAGRAMS, INCLUDING PERFORMANCE CURVES. COMPARE DESIGN REQUIREMENTS WITH SHOP DRAWING CAPACITIES.
- CHECK DAMPERS (AS APPLICABLE) FOR CORRECT AND LOCKED POSITION AND TEMP. CONTROL FOR COMPLETENESS OF INSTALLATION BEFORE STARTING FANS.
- CHECK FILTERS FOR CLEANLINESS AND PROPER INSTALLATION. M.C. SHALL REPLACE DIRTY FILTERS PRIOR TO TESTING & BALANCING.
- FIVE TUBE TRAVERSE IS THE GENERALLY ACCEPTED METHOD OF MEASURING AIRFLOW IN DUCTS. THE MAXIMUM STRAIGHT RUN SHOULD BE OBTAINED BEFORE AND AFTER THE TRAVERSE STATION - SEE CHAPTER 36 OF ASHRAE FUNDAMENTALS / STANDARD 111.

**VESTIBULE REQUIREMENTS (ECC 403.4.1.4):**

- HEATING / COOLED VESTIBULES:
- THE HEATING SYSTEMS FOR HEATED VESTIBULES WITH INTEGRAL HEATING SHALL BE PROVIDED WITH CONTROLS CONFIGURED TO SHUT OFF THE SOURCE OF HEATING WHEN THE OUTDOOR AIR TEMPERATURE IS GREATER THAN 45°F. VESTIBULE HEATING AND COOLING SYSTEMS SHALL BE CONTROLLED BY A THERMOSTAT LOCATED IN THE VESTIBULE CONFIGURED TO LIMIT HEATING TO A TEMPERATURE NOT GREATER THAN 60°F AND COOLING TO A TEMPERATURE NOT LESS THAN 55°F.
- SMITH'S DESIGN DATA FOR VESTIBULES:
- 4 AIR CHANGES PER HOUR
- 15% INFILTRATION RATE

**TENANT RTU NOTES:**

- 14" INSULATED RTU CURB IS M.C. PROVIDED / INSTALLED. SEE SPEC DIVISION 7 FOR MANUFACTURED CURB INFO
- PROVIDED WITH DRY BULB ECONOMIZER WITH BAROMETRIC RELIEF (FIELD INSTALLED BY M.C.)
- PROVIDED WITH NON-FUSED DISCONNECT SWITCH (INSTALLED BY E.C.)
- E.C. TO PROVIDE / INSTALL 115V CONVENIENCE OUTLET
- PROVIDED WITH SUPPLY-SIDE SMOKE DETECTOR
- DIVISION 28 TO PROVIDE PROVIDE CONNECTIONS BETWEEN SMOKE DETECTORS AND FIRE ALARM CONTROL PANEL UNIT TO SHUT DOWN UPON SMOKE DETECTOR ACTIVATION
- PROVIDE RTU WITH 1 EXTRA SET OF FILTERS.
- PROVIDE CONDENSATE DRAIN WITH MINIMUM 3" DEEP TRAP. M.C. TO DROP CONDENSATE PIPING INTO JOIST SPACE FOR CONNECTIONS BY P.C.
- RETURN AIR / OUTSIDE AIR SENSORS ARE FACTORY INSTALLED
- MC SHALL ENGAGE A FACTORY-PROVIDED SERVICE REPRESENTATIVE TO INSPECT, TEST, AND ADJUST RTUS AND COMPONENTS TO ENSURE PROPER INSTALLATION.
- MANUFACTURER-PROVIDED SERVICE REPRESENTATIVE SHALL PROVIDE THE OWNER / G.C. WITH WRITTEN DOCUMENTATION THAT ALL INSTALLATIONS ARE COMPLETE AND ACCURATE PER MANUF. STANDARDS. REFER TO SPEC 237413 FOR ADDITIONAL REQUIREMENTS.
- M.C. TO PROVIDE / INSTALL 7 DAY PROGRAMMABLE DIGITAL THERMOSTAT WITH AUTO CHANGEOVER, 5" DEAD-BAND, SETBACKS (55° / 85°), 2 HOUR OCCUPANT OVERRIDE, 10 HOUR BACK-UP.

RTU SCHEDULE - SMITH'S 303

RTU'S ARE OWNER-PROVIDED, M.C. INSTALLED. CURBS / CURB ADAPTORS ARE M.C. PROVIDED / M.C. INSTALLED

TAG	AREA SERVED	MODEL	TONS	BRAND	BLOWER															COOLING				HEATING				ELECTRICAL			DRAIN SIZE	ALT. (ASL')	WEIGHT (LBS)	REMARKS
					CFM					Temperature (°F)					OD Amb	Capacity MBH	Total	Sens.	ENERGY	REFRIGERANT	Temp (°F)		Heating Gas		Voltage	MCA	MOC							
					SA	OA	RA	HP	ESP (IWG)	Ent. Air DB	WB	Lvg. Air DB	WB	Ent. DB							Lvg. DB	In	Out	MBH										
RTU-A-2	BAKERY	LGT036H5E	3	LENNOX	1200	254	946	0.5	0.65"	80.4	60.9	55.2	51.1	108.4	32.6	31.1	17.5 SEER2	13.5 EER2	R-454b	58.6	99.5	65	52	80.0	460/3	10	15	1"	2,548'	870	REPLACES CARRIER MODEL: 50TFQ005, SERIAL: 1405G40443. CURB ADAPTOR IS ACCEPTABLE.			
RTU-A-3	SALES	LGT240H5M	20		8000	650	7350	4.62	0.65"	78.7	57.7	56.3	48.5	108.4	200.9	187.5	15.4 IEER	12 EER	R-454b	208.3	193.2	260	211	81.0	460/3	44	50	1"	2,548'	2,975	REPLACES LENNOX MODEL: LGH240H4M3SG SERIAL: 5618K08942. PROVIDE AES DROP BOX DIFFUSER ADB-6-25 AND FACTORY DAMPERS.			
RTU-A-4	SEAFOOD	LCT036H5E	3		1200	200	1000	0.5	0.50"	78.9	59.7	54.3	49.9	108.4	32	30.8	17.5 SEER2	13.5 EER2	R-454b	63.9	99.8	260	211	81.0	460/3	10	15	1"	2,548'	786	REPLACES CARRIER MODEL: 50TFQ005.			
RTU-A-5	DOCK	LGT156H5M	13		5000	510	4490	3.75	0.50"	76.6	56.2	54.6	46.7	108.4	125.2	120.2	15.4 IEER	12 EER	R-454b	63.9	99.8	260	211	81.0	460/3	30	35	1"	2,548'	2,400	REPLACES CARRIER MODEL: 48HID007. PROVIDE AES DROP BOX DIFFUSER ADB-1-12-4 AND FACTORY DAMPERS. SEE DETAIL 1, SHEET M5.1.			
RTU-A-7	CONFERENCE ROOM	LGT060H5E	5		2000	300	1700	1.2	0.65"	77.3	56.7	53.5	46.6	108.4	53.7	49.9	16.4 SEER2	12.5 EER2	R-454b	63.1	102.9	108	87	81.0	460/3	14	15	1"	2,548'	877	M.C. TO PROVIDE RTU CURB. SEE DIVISION 7 SPECS. CO2 SENSOR FOR DEMAND CONTROL VENTILATION BY OWNER. INSTALLED BY DIVISION 28.			
RTU-A-8	BREAK ROOM	LGT060H5E	5		2000	313	1687	1.2	0.65"	78.5	57.5	54.4	47.4	108.4	54.3	50.5	16.4 SEER2	12.5 EER2	R-454b	61.8	101.5	108	87	81.0	460/3	14	15	1"	2,548'	877	M.C. TO PROVIDE RTU CURB. SEE DIVISION 7 SPECS. CO2 SENSOR FOR DEMAND CONTROL VENTILATION BY OWNER. INSTALLED BY DIVISION 28.			
RTU-A-9	DOCK	LGT072H5E	6.0		2400	240	2160	1.32	0.65"	82.8	60.6	54.7	47.6	108.4	63.7	59.5	17.3 IEER	12.2 EER	R-454b	61.3	94.5	108	87	81.0	460/3	16	20	1"	2,548'	830	REPLACES EXISTING RTU: LENNOX GCS-16-261-50. PROVIDE AES DROP BOX DIFFUSER ADB-1-7-4 AND FACTORY DAMPERS. SEE DETAIL 1, SHEET M5.1.			
RTU-A-10	DOCK	LGT092H5E	7.5		3000	260	2740	1.28	0.75"	82.8	60.8	58	50.9	108.4	80.9	76.8	16.1 IEER	12.3 EER	R-454b	61.3	93.4	130	104	81.0	460/3	22	25	1"	2,548'	1,307	PROVIDE AES DROP BOX DIFFUSER ADB-1-7-4 AND FACTORY DAMPERS. SEE DETAIL 1, SHEET M5.1.			
RTU-A-11	DOCK	LGT120H5E	10		4000	260	3740	2.28	0.5"	84.5	61.8	59.7	52.3	108.4	109.9	102.6	16.1 IEER	12.1 EER	R-454b	59.5	92.8	180	144	81.0	460/3	23	30	1"	2,548'	1,355	PROVIDE AES DROP BOX DIFFUSER ADB-1-10-4 AND FACTORY DAMPERS. SEE DETAIL 1, SHEET M5.1.			
RTU-C-7	PHARMACY	LGT072H5E	6		2400	475	1925	1.32	0.65"	80	60.5	55.3	50.8	108.4	65.7	61.5	17.3 IEER	12.2 EER	R-454b	60.1	106.4	150	121	81.0	460/3	16	20	1"	2,548'	888	M.C. TO PROVIDE RTU CURB. SEE DIVISION 7 SPECS.			
RTU-C-8	VESTIBULE (HORIZ. SUPPLY, VERT. RETURN)	LGT092H5E	7.5		3000	205	2795	1.47	1.0"	86.7	61.1	62	51.6	108.4	81.3	76.6	16.1 IEER	12.3 EER	R-454b	58.1	90.2	130	104	81.0	460/3	22	25	1"	2,548'	1,304	M.C. TO PROVIDE RTU CURB. SEE DIVISION 7 SPECS.			
RTU-D-1	OFFICES	LGT102H5E	8.5	3000	260	2740	1.13	0.60"	76.6	55.7	52	45	108.4	81.1	77.5	16.1 IEER	12.1 EER	R-454b	64.5	96.6	130	104	80.0	460/3	22	25	1"	2,548'	1314	REPLACES CARRIER MODEL: 48HID009, SERIAL: 2405G40666. CURB ADAPTOR IS ACCEPTABLE.				
RTU-D-2	SALES	LGT120H5E	10	4000	1000	3000	2.05	0.5	84.5	61.8	59.3	52.2	108.4	109.9	130.4	16.1 IEER	12.1 EER	R-454b	59.5	92.8	180	144	81.0	460/3	23	30	1"	2,548'	1,355	REPLACES LENNOX MODEL: LG240SS1. PROVIDE AES DROP BOX DIFFUSER ADB-1-10-4 AND FACTORY DAMPERS. SEE DETAIL 1, SHEET M5.1.				
RTU-D-4	SEATING	LGT156H5M	13	5000	740	4260	1.65	0.50"	78.2	57.3	55.6	48	108.4	127.6	121.7	15.4 IEER	12 EER	R-454b	62.1	98	260	211	81.0	460/3	30	35	1"	2,548'	2,400	REPLACES LENNOX MODEL: GCS26-653-125-22. CURB ADAPTOR IS ACCEPTABLE. CO2 SENSOR FOR DEMAND CONTROL VENTILATION BY OWNER. INSTALLED BY DIVISION 28.				
RTU-D-5	DELI	LGT120H4E	10	4000	550	3450	2.46	0.5	84.5	61.8	60.8	52.8	108.4	106.2	98.4	IEER: 15.5	EER: 12.1	R-454b	59.5	92.8	180	144	81.0	460/3	25	30	1"	2,548'	1,355	REPLACES CARRIER MODEL: 48HJD009M651HQ, SERIAL: 2405G40666. CURB ADAPTOR IS ACCEPTABLE.				
RTU-D-6	TENANT	LGT092H5E	7.5	3000	300	2700	1.47	1.0"	79.2	58.1	55.5	48.4	108.4	79	74.3	16.1 IEER	12.3 EER	R-454b	65.8	97.9	130	104	80.00	460/3	22	25	1"	2,548'	1,307	STUB DUCTS INTO SPACE JUST BELOW STRUCTURE FOR FUTURE CONNECTIONS BY OTHERS. SEE TENANT RTU NOTES, SHEET M6.2.				

**CO2 SENSOR SEQUENCE OF OPERATIONS**

OUTSIDE AIR DAMPERS WILL BE SET TO MINIMUM OUTSIDE AIR PER RTU / VENTILATION SCHEDULES. DAMPERS SHALL ADJUST UP TO 100% OUTSIDE AIR BASED ON CO2 SENSOR READINGS. CO2 SENSORS SHALL BE MOUNTED IN SPACE AND OUTSIDE AT RTU. IF CO2 LEVELS IN THE SPACE REACH 100 PPM GREATER THAN THE OUTSIDE AIR, THE OA DAMPERS WILL BEGIN TO OPEN AND WILL MODULATE OPEN UNTIL CO2 READINGS INSIDE AND OUTSIDE ARE THE SAME. UPON READING 10% ABOVE ACCEPTABLE LEVEL, SENSOR SHALL PROVIDE A VISUAL OR AUDIBLE ALERT AT UNIT. CO2 SENSORS SHALL BE INSTALLED AT SAME ELEVATION AS THERMOSTATS. CO2 SENSOR IS OWNER-PROVIDED, INSTALLED BY DIVISION 28.

VENTILATION CALCULATIONS - SMITH'S 303

ZONE	ROOM	EQUIPMENT TAG	CODE OCCUPANCY CLASSIFICATION	STATUS	SUPPLY CFM	PERCENT OUTSIDE AIR	PEOPLE OUTDOOR AIR RATE (Rp) (cfm/person)	ZONE POPULATION (Pz) (people / 1000 sqft)	Rp * Pz	OCCUPANT DENSITY (Ra) (cfm/sqft)	ZONE FLOOR AREA (Az) (sqft)	Ra * Az	BREATHING ZONE (Vbz = Rp * Pz + Ra * Az)	AIR DISTRIBUTION EFFECTIVENESS (Ez) ceiling supply/return warm air	ZONE OUTDOOR AIR FLOW RATE (Voz = Vbz / Ez)	BALANCING OUTSIDE AIR VALUES
A-1	SALES - SECTION A	RTU-A-1	SUPERMARKET	EXISTING	8,000	8%	7.5	6	221.85	0.06	4950	295.8	517.65	0.8	647.06	650
A-2	BAKERY	RTU-A-2	PREP AREA	NEW - BY OWNER	1,200	21%	5	10	64.9	0.18	1298	233.64	298.54	0.8	373.18	254
A-3	SALES - SECTION A	RTU-A-3	SUPERMARKET	NEW - BY OWNER	8,000	8%	7.5	6	222.75	0.06	4950	297	519.75	0.8	649.69	650
A-4	SEAFOOD	RTU-A-4	PREP AREA	NEW - BY OWNER	1,200	17%	5	2	8.4	0.18	840	151.2	159.60	0.8	199.50	200
A-5	DOCK	RTU-A-5	SHIPPING / RECEIVING	NEW - BY OWNER	5,000	10%	10	2	60	0.12	3000	360.00	420.00	0.8	525.00	510
A-6	RESTROOMS	RTU-A-6	RESTROOMS	EXISTING	1,200	10%	0	0	0		767				120	
A-7	CONF. ROOM	RTU-A-7	CONFERENCE	NEW - BY OWNER	2,000	15%	5	50	191.25	0.06	765	45.90	237.15	0.8	296.44	300
A-8	BREAKROOM	RTU-A-8	OFFICE	NEW - BY OWNER	2,000	16%	5	50	132.5	0.12	530	63.6	196.10	0.8	245.13	313
							5	2	4.94	0.06	494	29.64	34.58	0.8	43.23	
							5	5	1.575	0.06	63	3.78	5.36	0.8	6.69	
A-9	DOCK	RTU-A-9	SHIPPING / RECEIVING	NEW - BY OWNER	2,400	10%	10	2	26.8	0.12	1340	160.80	187.60	0.8	234.50	240
A-10	DOCK	RTU-A-10	SHIPPING / RECEIVING	NEW - BY OWNER	3,000	10%	10	2	29.54	0.12	1477	177.24	206.78	0.8	258.48	300
A-11	DOCK	RTU-A-11	SHIPPING / RECEIVING	NEW - BY OWNER	4,000	8%	10	2	29.54	0.12	1477	177.24	206.78	0.8	258.48	300
B-1	SALES - SECTION B	RTU-B-2	SUPERMARKET	EXISTING	8,000	9%	7.5	6	244.62	0.06	5436	326.16	570.78	0.8	713.48	715
B-2	SALES - SECTION B	RTU-B-2	SUPERMARKET	EXISTING	8,000	10%	7.5	6	259.245	0.06	5761	345.66	604.91	0.8	756.13	760
B-3	SALES - SECTION B	RTU-B-3	SUPERMARKET	EXISTING	8,000	8%	7.5	6	212.175	0.06	4715	282.9	495.08	0.8	618.84	620
B-4	SALES - SECTION B	RTU-B-4	SUPERMARKET	EXISTING	8,000	8%	7.5	6	224.37	0.06	4986	299.16	523.53	0.8	654.41	655
B-5	SALES - SECTION B	RTU-B-5	SUPERMARKET	EXISTING	8,000	8%	7.5	6	229.5	0.06	5100	306	535.50	0.8	669.38	670
B-6	SALES - SECTION B	RTU-B-6	SUPERMARKET	EXISTING	8,000	8%	7.5	6	208.89	0.06	4642	278.52	487.41	0.8	609.26	610
B-7	BACKROOM	RTU-B-7	SHIPPING / RECEIVING	EXISTING	4,000	19%	10	2	84.66	0.12	4233	507.96	592.62	0.8	740.78	745
B-8	BACKROOM	RTU-B-8	SHIPPING / RECEIVING	EXISTING	4,000	20%	10	2	89.84	0.12	4492	539.04	628.88	0.8	786.10	790
C-1	SALES - SECTION C	RTU-C-1	SUPERMARKET	EXISTING	10,000	8%	7.5	6	280.305	0.06	6229	373.74	654.05	0.8	817.56	820
C-2	SALES - SECTION C	RTU-C-2	SUPERMARKET	EXISTING	8,000	7%	7.5	6	194.175	0.06	4315	258.90	453.08	0.8	566.34	570
C-3	SALES - SECTION C	RTU-C-3	SUPERMARKET	EXISTING	8,000	8%	7.5	6	217.755	0.06	4839	290.34	508.10	0.8	635.12	640
C-4	SALES - SECTION C	RTU-C-4														

AIR DEVICE SCHEDULE										
PLAN CODE	SIZE	NECK	DUTY	INSTALL TYPE	MAX CFM	MAX N.C.	150-100-50	MANUFACTURER	MODEL	COMMENTS
1	12" X 12"	10" X 10"	EXHAUST / RETURN	GYP.	625	29	N/A	PRICE	PDR	HINGED, REMOVABLE PERFORATED FACE PLATE FOR ACCESS TO RADIAL BALANCING DAMPER.
2	20" X 20"	8"Ø	SQUARE SUPPLY	GYP.	314	24	4'-5'-5"	PRICE	SPD	R-6 INSULATED BACK PAN. REMOVABLE FACE FOR ACCESS TO FACTORY RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
3	12" X 24"	10" X 22"	TRANSFER / RETURN	LAY-IN	917	20		PRICE	PDR	PROVIDE O.B.D. AND TRANSITIONS AS REQUIRED.
4	24" X 24"	12"Ø	SQUARE SUPPLY	LAY-IN	707	27	VERTICAL PROJECTION	PRICE	ASDA	ALUMINUM CONSTRUCTION. ADJUSTABLE PATTERN DEFLECTORS, SET TO VERTICAL PROJECTION. REMOVABLE CORE FOR ACCESS TO RADIAL BALANCING DAMPER.
5	24" X 24"	8"Ø	SQUARE SUPPLY	LAY-IN	349	26	4'-6'-10"	PRICE	SCD	REMOVABLE CORE FOR ACCESS TO RADIAL BALANCING DAMPER.
6	24" X 24"	N/A	EGG CRATE RETURN	EXPOSED DUCT	3000	26	N/A	TITUS	50F	1" X 1" X 1" OPEN GRID RETURN. PROVIDE BALANCING DAMPER. REMOVE EXISTING RETURN. EXTEND DUCT AS REQUIRED TO ACCOMMODATE NEW GRILLE. SEE HSD-1, SHEET MS.1.
7	48" X 30"	N/A	EGG CRATE RETURN	EXPOSED DUCT	7680	27		TITUS	50F	
8	20" X 20"	10"Ø	SQUARE SUPPLY	GYP.	436	24	4'-6'-9"	PRICE	SPD	R6 INSULATED BACKPAN. REMOVABLE FACE FOR ACCESS TO RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
9	10" X 10"	N/A	SIDEWALL	GYP.	480	25	11'-14'-20"	PRICE	520	DUAL DEFLECTION. HORIZONTAL VANES W/ 45 DEGREE DEFLECTION. PROVIDE W/ O.B.D. FACTORY PRIMED FOR PAINT BY G.C. TO MATCH WALL.
10	24" X 12"	N/A	EGG CRATE RETURN	EXPOSED DUCT	1092	13		TITUS	50F	1" X 1" X 1" OPEN GRID RETURN. PROVIDE BALANCING DAMPER. REMOVE EXISTING RETURN. EXTEND DUCT AS REQUIRED TO ACCOMMODATE NEW GRILLE. SEE HSD-1, SHEET MS.1.
11	24" X 36"	N/A	EGG CRATE RETURN	EXPOSED DUCT	4528	26	N/A	TITUS	50F	
12	24" X 24"	10"Ø	SQUARE SUPPLY	LAY-IN	545	30	5'-8'-12"	PRICE	SPD	R6 INSULATED BACKPAN. REMOVABLE FACE FOR ACCESS TO RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
13	24" X 24"	8"Ø	SQUARE SUPPLY	LAY-IN	349	27	4'-6'-10"	PRICE	SPD	R6 INSULATED BACKPAN. REMOVABLE FACE FOR ACCESS TO RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
14	24" X 24"	12"Ø	SQUARE SUPPLY	LAY-IN	707	29	6'-9'-14"	PRICE	SPD	R6 INSULATED BACKPAN. REMOVABLE FACE FOR ACCESS TO RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
15	24" X 24"	14"Ø	SQUARE SUPPLY	LAY-IN	855	27	6'-10'-15"	PRICE	SPD	R6 INSULATED BACKPAN. REMOVABLE FACE FOR ACCESS TO RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
16	24" X 24"	22" X 22"	PERF. RETURN / TRANS.	GYP.	2,353	26	N/A	PRICE	PDR	PROVIDE W/ OBD WHERE INDICATED
17	24" X 48"	22" X 46"	PERF. RETURN	LAY-IN	5,776	26	N/A	PRICE	80 SERIES	PROVIDE REQUIRED TRANSITIONS AND BALANCING DAMPER.
18	12" X 24"	10" X 22"	TRANSFER / RETURN	GYP.	917	20	N/A	PRICE	PDR	PROVIDE O.B.D. AND TRANSITIONS AS REQUIRED.
19	24" X 24"	14"Ø	SQUARE SUPPLY	GYP.	855	27	6'-10'-15"	PRICE	SPD	R6 INSULATED BACKPAN. REMOVABLE FACE FOR ACCESS TO RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
20	24" X 24"	10"Ø	SQUARE SUPPLY	GYP.	545	30	5'-8'-12"	PRICE	SPD	R6 INSULATED BACKPAN. REMOVABLE FACE FOR ACCESS TO RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
21	24" X 24"	12"Ø	SQUARE SUPPLY	GYP.	707	29	6'-9'-14"	PRICE	SPD	R6 INSULATED BACKPAN. REMOVABLE FACE FOR ACCESS TO RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
22	12" X 12"	6"Ø	SQUARE SUPPLY	GYP.	157	20	4'-7'-10"	PRICE	SPD	R6 INSULATED BACKPAN. REMOVABLE FACE FOR ACCESS TO RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
23	24" X 24"	8"Ø	SQUARE SUPPLY	LAY-IN	225 @ 0.1" W.C.	20	10'-7'-5"	PRICE	ACUTHERM	THERMA-FUSER TF-HC
24	24" X 24"	22" X 22"	PERF. RETURN / EXHAUST	LAY-IN	2,353	26	N/A	PRICE	PDR	PROVIDE REQUIRED TRANSITIONS AND BALANCING DAMPER.
25	24" X 48"	22" X 46"	PERF. RETURN	GYP.	5,776	26	N/A	PRICE	80 SERIES	PROVIDE REQUIRED TRANSITIONS AND BALANCING DAMPER.
26	36" X 5"	N/A	SIDEWALL	GYP.	640	19	11'-17'-23"	PRICE	520	DUAL DEFLECTION. LONG-SIDE PARALLEL TO FLOOR. 45 DEGREE DEFLECTION. PROVIDE W/ O.B.D. FACTORY PRIMED FOR PAINT BY G.C. TO MATCH WALL.
27	24" X 24"	18" X 18"	SQUARE SUPPLY	LAY-IN	1,350	34	19'-24'-34"	PRICE	SMD	STEEL CONSTRUCTION. PROVIDE TRANSITIONS AND O.B.D.
28	24" X 24"	6"Ø	SQUARE SUPPLY	LAY-IN	157		2'-4'-6"	PRICE	SPD	R6 INSULATED BACKPAN. REMOVABLE FACE FOR ACCESS TO RADIAL BALANCING DAMPER. FACTORY BLOCK-OFFS WHERE INDICATED
29	44" X 44"	N/A	EGG CRATE RETURN	EXPOSED DUCT	10392	27	N/A	TITUS	50F	1" X 1" X 1" OPEN GRID RETURN. PROVIDE BALANCING DAMPER. REMOVE EXISTING RETURN. EXTEND DUCT AS REQUIRED TO ACCOMMODATE NEW GRILLE. SEE HSD-1, SHEET MS.1.
30	42" X 15"	N/A	SIDEWALL	EXPOSED DUCT	3,063	29	87"-106'-150"	PRICE	HCD	HIGH CAPACITY DRUM LOUVER. ROTATEABLE DRUM FOR 60 DEGREE ADJUSTMENT. SPLIT BLADE FACE FOR INDIVIDUALLY ADJUSTABLE VANES. ADJUST TO AVOID DISRUPTION OF SUSPENDED SIGNAGE. FACTORY BALANCING DAMPER.
31	36" X 5"	N/A	SIDEWALL	EXPOSED DUCT	855	28	14'-19'-26"	PRICE	520	DUAL DEFLECTION. LONG-SIDE PARALLEL TO FLOOR. 45 DEGREE DEFLECTION. PROVIDE W/ O.B.D. FACTORY PRIMED FOR PAINT BY G.C.
32	36" X 8"	N/A	SIDEWALL	GYP.	1080	21	14'-21'-29"	PRICE	520	DUAL DEFLECTION. LONG-SIDE PARALLEL TO FLOOR. 45 DEGREE DEFLECTION. PROVIDE W/ O.B.D. FACTORY PRIMED FOR PAINT BY G.C.
33	31.5"Ø	14"Ø	ROUND PLAQUE SUPPLY	OPEN CEILING	962	31		PRICE	RPD	ADJUSTABLE CORE. PROVIDE O.B.D. SET AT SAME ELEVATION AS LIGHTS. FACTORY PRIMED FOR PAINT BY G.C.
34	22.5"Ø	10"Ø	ROUND PLAQUE SUPPLY	OPEN CEILING	491	19		PRICE	RPD	SET ADJUSTABLE CORE TO PROJECT VERTICALLY. PROVIDE O.B.D. SET AT SAME ELEVATION AS LIGHTS. FACTORY PRIMED FOR PAINT BY G.C.

AIR BALANCE SCHEDULE - SM303							
EQUIPMENT	STATUS	AREA SERVED	SUPPLY CFM	RETURN CFM	OUTSIDE CFM	EXHAUST CFM	Comments
RTU-A-1	EXISTING	SALES - "A"	8,000	7,350	650		RE-BALANCE EXISTING RTU AS NOTED
RTU-A-2	NEW - BY OWNER	BAKERY	1,200	946	254		
RTU-A-3	NEW - BY OWNER	SALES - "A"	8,000	7,350	650		
RTU-A-4	NEW - BY OWNER	SEAFOOD	1,200	1,000	200		
RTU-A-5	NEW - BY OWNER	DOCK	5,000	4,490	510		
RTU-A-6	EXISTING	RESTROOMS	1,200	1,080	120		RE-BALANCE EXISTING RTU AS NOTED
RTU-A-7	NEW - BY OWNER	CONFERENCE	2,000	1,700	300		DEMAND CONTROL VENTILATION. CO2 SENSOR BY OWNER.
RTU-A-8	NEW - BY OWNER	BREAKROOM	2,000	1,687	313		DEMAND CONTROL VENTILATION. CO2 SENSOR BY OWNER.
RTU-A-9	NEW - BY OWNER	DOCK	2,400	2,160	240		
RTU-A-10	NEW - BY OWNER	DOCK	3,000	2,740	260		
RTU-A-11	NEW - BY OWNER	DOCK	4,000	3,740	260		
RTU-B-1	EXISTING	SALES - "B"	8,000	7,285	715		
RTU-B-2	EXISTING	SALES - "B"	8,000	7,240	760		
RTU-B-3	EXISTING	SALES - "B"	8,000	7,380	620		
RTU-B-4	EXISTING	SALES - "B"	8,000	7,345	655		RE-BALANCE EXISTING RTU AS NOTED
RTU-B-5	EXISTING	SALES - "B"	8,000	7,330	670		
RTU-B-6	EXISTING	SALES - "B"	8,000	7,390	610		
RTU-B-7	EXISTING	BACKROOM	4,000	3,255	745		
RTU-B-8	EXISTING	BACKROOM	4,000	3,210	790		
RTU-C-1	EXISTING	SALES - "C"	10,000	9,180	820		
RTU-C-2	EXISTING	SALES - "C"	8,000	7,430	570		
RTU-C-3	EXISTING	SALES - "C"	8,000	7,360	640		
RTU-C-4	EXISTING	SALES - "C"	8,000	7,090	910		RE-BALANCE EXISTING RTU AS NOTED
RTU-C-5	EXISTING	GAMING	4,000	3,500	500		
RTU-C-6	EXISTING	CUSTOMER SERVICE	4,000	3,870	130		
RTU-C-7	NEW - BY OWNER	PHARMACY	2,400	1,925	475		
RTU-C-8	NEW - BY OWNER	VESTIBULE	3,000	2,795	205		
RTU-D-1	NEW - BY OWNER	OFFICES	3,400	3,185	260		
RTU-D-2	NEW - BY OWNER	SALES - "D"	4,000	3,000	1,000		RE-BALANCE EXISTING RTU AS NOTED
RTU-D-3	RELOCATED	PICK-UP	8,000	7,425	575		REMOVE FROM SECTION "C" AND BALANCE AS NOTED
RTU-D-4	NEW - BY OWNER	SEATING / SALES	4,000	3,270	740		DEMAND CONTROL VENTILATION. CO2 SENSOR BY OWNER.
RTU-D-5	NEW - BY OWNER	DELI	4,000	3,450	550		
EF-1A		DELI			-1,400		INTERLOCKED WITH HEAT SENSOR / MAU-1
EF-1B		DELI			-1,400		INTERLOCKED WITH HEAT SENSOR / MAU-1
EF-2		FRONT RESTROOMS			-800		OPERATES DURING HOURS OF OPERATION
EF-3		BACK RESTROOMS			-1,100		OPERATES DURING HOURS OF OPERATION
EF-4		BAKERY OVEN			-900		EQUIPMENT INTERLOCK
EF-5		BAKERY OVEN			-900		EQUIPMENT INTERLOCK
D176B-208		PAN WASHER			-400		INTEGRAL FAN. SEE DETAIL
EF-6		ELECTRICAL (DOCK)			-700		THERMOSTAT ACTIVATED
EF-7		SEATING RESTROOMS			-300		OPERATES DURING HOURS OF OPERATION
EF-8		SEAFOOD			-800		OPERATES DURING HOURS OF OPERATION
EF-9		ACCOUNTING			-75		EXCLUDED FROM TOTAL AS EXHAUST TERMINATES INSIDE BUILDING
EF-10		GAMING			-1,825		OPERATES DURING HOURS OF OPERATION
EF-11		EXISTING RESTROOMS			-300		OPERATES DURING HOURS OF OPERATION
EF-12		WEST ELECTRICAL (LARGE)			-700		THERMOSTAT ACTIVATED
EF-13		WEST ELECTRICAL (LARGE)			-300		
MAU-1	NEW - BY OWNER	DELI HOODS 1A, 1B	2525		2525		
			SUPPLY CFM	RETURN CFM	OUTSIDE CFM	EXHAUST CFM	COORDINATE SYSTEM BALANCING WITH OWNER'S AGENT PER SPEC 230593
			167,325	148,158	19,222	-11,825	
					19,222		
			BUILDING PRESSURIZATION WITHOUT COOKING EXHAUST		13,097	7,397	BUILDING PRESSURIZATION - SEE M1.1 / M1.2 FOR RELIEF
					6400	997	BUILDING PRESSURIZATION AFTER RELIEF

MINI-SPLIT SYSTEM SCHEDULE - M.C. PROVIDED, M.C. INSTALLED																										
INDOOR UNIT											OUTDOOR UNIT										ELECTRICAL DATA					
PLAN MARK	MFR	MODEL	AREA SERVED	MOUNT	CFM	CONDENSATE DRAIN	DIMENSIONS			WEIGHT (LBS)	PLAN MARK	SEER2	HSPF2	MODEL	COOLING (BTUH)	HEATING (BTUH)	REF.	DIMENSIONS			WEIGHT (LBS)	VOLT	PH	MCA	MOCF	NOTES
							WIDTH	HEIGHT	DEPTH									WIDTH	HEIGHT	DEPTH						
FC-1		AC04BNADCH	ECR	SUSPENDED	1289	1" ID	33 1/16"	11 5/16"	33 1/16"	50	CU-1	17.8	8.6	AC048BKADCH	48000	54000		37"	47 11/16"	13"	200				1.2,3,4,5,6,7,8	
FC-2	SAMSUNG	AC036BNDCH	ELECT. CLOSET	WALL	830	11/16" OD	50 3/8"	9 15/16"	13 9/16"	42	CU-2	19.2	8.5	AC036BKADCH	36000	40000	R410A	37"	47 11/16"	13"	190	208	1	32.8	40	1.2,3,4,6,7,8
FC-3		AC018BNADCH	FLORAL STORAGE	WALL	615	11/16" OD	41 9/16"	8 7/16"	11 3/4"	26	CU-3	20.1	8.2	AC018BKADCH	18000	20000		34 5/8"	31 7/16"	12 1/4"	120			20.1	25	1.2,3,4,6,7,8

NOTES:

- AVOID PLACING INDOOR UNIT OVER ELECTRICAL EQUIPMENT
- ROUTE CONDENSATE TO DRAIN PROVIDED BY P.C.
- OUTDOOR UNIT POWERS INDOOR UNIT (14 AWG X 3). COORDINATE WITH E.C.
- INSTALL AT SAME ELEVATION AS LIGHTS.
- INTEGRAL CONDENSATE PUMP.
- PROVIDE FRONT / BACK WIND BAFFLES
- PROVIDE WIRED TOUCHSCREEN CONTROLLER.
- LINE SETS SHALL BE INSULATED IN ACCORDANCE WITH I.E.C.C. TABLE C403.12.3.1
- INSULATION EXPOSED TO WEATHER SHALL BE PROTECTED FROM DAMAGE / SHIELDED FROM SOLAR RADIATION.
- \* SEE DETAIL HSD-11, MS.1 AND ASD-89

LOUVERED PENTHOUSE SCHEDULE											
SYMBOL	LOCATION	APPLICATION	MANUFACTURER	MODEL NO.	AIR FLOW (cfm)	MAXIMUM STATIC PRESSURE	THROAT SIZE W x D (inches)	TIERS HIGH	THROAT AREA (SQ. FT.)	THROAT VELOCITY (FPM)	WEIGHT (lbs)
LPH-1	ROOF	BUILDING RELIEF	PennBarry	PH-4848-4	3,200	0.03" W.G.	48" X 48"	5	14.93	482.2	110
LPH-2	ROOF	BUILDING RELIEF	PennBarry	PH-4848-4	3,200	0.03" W.G.	48" X 48"	5	14.93	482.2	110

ACCESSORIES

- 18" HIGH PREFABRICATED ROOF CURB
- 1/2" MESH GALVANIZED BRD SCREEN
- COUNTER BALANCE BACKDRAFT DAMPER

PRESCOTT MUIR ARCHITECT 171 WEST PIERPONT AVE. SALT LAKE CITY, UTAH 84101 TEL: 801.521.9111 FAX: 801.521.9158

MECHANICAL SCHEDULES  
 MECHANICAL ENGINEERS  
 PVE INC. 801.969.3168  
 SMITH'S FOOD AND DRUG STORE #303 560 N STEPHANIE ST HENDERSON, NV  
 PVE PROJECT NO: 240214

DATE: 11.22.24  
 BID SET  
 SHEET NO.: M6.1  
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