

SYSTEM A Discharge/Heat Reclaim	SYSTEM B Discharge/Heat Reclaim	SYSTEM D Discharge/Heat Reclaim	SYSTEM E Discharge/Heat Reclaim								
Loop/Segment	Load (mbh)	Pipe Size	Loop/Segment	Load (mbh)	Pipe Size	Loop/Segment	Load (mbh)	Pipe Size			
AD	142.5	1 3/8	BD	327.6	1 3/8	CD	95	1 3/8	DD	295.4	2 1/8
AHS	142.5	1 3/8	BHS	327.6	1 3/8	CHS	95	1 3/8	DHS	295.4	2 1/8
APR	142.5	1 3/8	BPR	327.6	1 3/8	CHR	95	1 3/8	DPR	295.4	2 1/8
ALR	142.5	7/8	BLR	327.6	7/8	CLR	95	7/8	DLR	295.4	1 5/8

Heat Reclaim Coil Design Information

Store Number	R543
Refrigeration Designer	E. Rowe
Date	9/4/2018
Refrigeration System Information	
Refrigeration Application Type	Protocol
Number of Circuits	2
Inlet Gas Temperature (°F)	160
DOAS 1	
System	Protocol 'A' Protocol 'B'
Refrigerant	R407A R407A
Condensing Temp. (°F)	105 110
THR (MBH)	285 655.2
*Derated THR (MBH)	142.5 327.6
Mass Flow Rate (lb/Hr)	2358 7350
*Sizing Based to 80%	
*Protocols Derated to 50%	
Air Side Information:	
Design CFM	4,850
EAT (°F)	55.0
LAT (°F)	144.3
Total Reclaim Heat (Btu/Hr) = 470,166	

Heat Reclaim Coil Design Information

Store Number	R543
Refrigeration Designer	E. Rowe
Date	9/4/2018
Refrigeration System Information	
Refrigeration Application Type	Protocol
Number of Circuits	2
Inlet Gas Temperature (°F)	160
DOAS 2	
System	Protocol 'D' Protocol 'E'
Refrigerant	R407A R407A
Condensing Temp. (°F)	105 110
THR (MBH)	190 590.8
*Derated THR (MBH)	95.0 295.4
Mass Flow Rate (lb/Hr)	1572 6290
*Sizing Based to 80%	
*Protocols Derated to 50%	
Air Side Information:	
Design CFM	4,850
EAT (°F)	55.0
LAT (°F)	129.2
Total Reclaim Heat (Btu/Hr) = 390,400	

EQUIPMENT MARK	DESCRIPTION	LOCATION	STATUS	FED FROM	WEIGHT (lb)	MANUFACTURER	MODEL	EMERGENCY	VOLTS	PHASE	CFM (cfm)	ESP (in WC)	QACFM (cfm)	CO2 CFM (cfm)	FLA (amps)	MCA (amps)	OCF (amps)
AC-1	DUCTLESS SPLIT UNIT	BCR	LOSS PREVENTION	DU-2	100	MITSUBISHI	MSZ-GJ28VA1U	008	120	1	100	0.75	0	0	1	15	
AC-2	DUCTLESS SPLIT HIGH WALL UNIT	DU-2	LOSS PREVENTION	DU-2	100	MITSUBISHI	MSZ-GJ28VA1U	008	120	1	100	0.75	0	0	1	15	
AC-3	DUCTLESS SPLIT HIGH WALL UNIT	ELEV EQUIP	LOSS PREVENTION	DU-2	100	MITSUBISHI	MSZ-GJ28VA1U	008	120	1	100	0.75	0	0	1	15	
CU-1	DUCTLESS SPLIT OUTDOOR CONDENSING UNIT	FOR	LOSS PREVENTION	DU-2	118	MITSUBISHI	MUJ-GJ28VA1U	008	1	1	1000	0.75	0	0	1	1	00
CU-2	DUCTLESS SPLIT OUTDOOR CONDENSING UNIT	LOSS PREVENTION	LOSS PREVENTION	DU-2	100	MITSUBISHI	MUJ-GJ28VA1U	008	1	1	1000	0.75	0	0	1	1	00
CU-3	DUCTLESS SPLIT OUTDOOR CONDENSING UNIT	ROOF - ELEV EQUIP	LOSS PREVENTION	DU-2	100	MITSUBISHI	MUJ-GJ28VA1U	008	1	1	1000	0.75	0	0	1	1	00

EQUIPMENT MARK	DESCRIPTION	LOCATION	MANUFACTURER	MODEL	VOLTS	PHASE	CFM (cfm)	ESP (in WC)	QACFM (cfm)	NOMINAL TONS	CLG SENS (mbh)	HTG SENS (mbh)	LAT HTG (Deg F)	GAS HTG IN (mbh)	GAS HTG OUT (mbh)	FLA (amps)	MCA (amps)	OCF (amps)	ACCESSORIES	Mark	Comments
DOAS-1	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-040-180-0	3	180	0.45	0	15	107	88	48	82	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-1	
DOAS-2	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-040-180-0	3	180	0.45	0	15	114	105	87	81	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-2	
RTU-1	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	108	88	47	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-3	
RTU-2	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	110	87	84	79	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-4	
RTU-3	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	108	88	47	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-5	
RTU-4	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	110	87	84	79	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-6	
RTU-5	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	108	88	47	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-7	
RTU-6	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	110	87	84	79	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-8	
RTU-7	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	108	88	47	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-9	
RTU-8	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	110	87	84	79	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-10	
RTU-9	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	108	88	47	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-11	
RTU-10	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	110	87	84	79	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-12	
RTU-11	PACKAGED OUTDOOR ROOF TOP UNIT	SEATING	AMON	RN-028-180-0	3	180	0.55	0	15	102	85	80	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-13	
RTU-12	PACKAGED OUTDOOR ROOF TOP UNIT	SEATING	AMON	RN-028-180-0	3	180	0.55	0	15	102	85	80	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-14	
RTU-13	PACKAGED OUTDOOR ROOF TOP UNIT	CONFERENCE/BREAKROOM	AMON	RN-010-180-0	3	180	0.35	0	15	108	88	47	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-15	
RTU-14	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	110	87	84	79	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-16	
RTU-15	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	108	88	47	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-17	
RTU-16	PACKAGED OUTDOOR ROOF TOP UNIT	CLUB/LOBBY	AMON	RN-024-180-0	3	180	0.45	0	15	104	102	101	100	240	195	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-18	
RTU-17	PACKAGED OUTDOOR ROOF TOP UNIT	BACKLobby	AMON	RN-015-180-0	3	180	0.35	0	15	110	87	84	79	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-19	
RTU-18	PACKAGED OUTDOOR ROOF TOP UNIT	SALES	AMON	RN-015-180-0	3	180	0.35	0	15	108	88	47	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-20	
RTU-19	PACKAGED OUTDOOR ROOF TOP UNIT	SELL	AMON	RN-015-180-0	3	180	0.35	0	15	108	88	47	80	195	158	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-21	
RTU-20	PACKAGED OUTDOOR ROOF TOP UNIT	PHARMACY	AMON	RN-027-180-0	3	180	0.45	0	15	104	102	101	100	240	195	37	41	35	2.3, 4.5, 7.2, 9.2	RTU-22	

SYMBOL	TYPE	BASIS OF DESIGN (TYPUS, UNLESS NOTED OTHERWISE)	MOUNTING	BORDER	REMARKS
RD	RETURN GRILLE		DUCT	WALL	D
CD	CEILING DIFFUSER				B
SD	SIDE WALL DIFFUSER				AB
RR	RETURN REGISTER				B
ER	EXHAUST REGISTER				ABG
PR	PLY REGISTER	30PRS			C
RD	RETURN REGISTER				C
VA	VAV DIFFUSER	ACCU/THERM T/FHC			B
TR	TRANSFER GRILLE	25SR			ABG
DB-1	DRYBOX DIFFUSER, 6 WAY THROW	AES INDUSTRIES ADB-1-60-3			C
DB-2	DRYBOX DIFFUSER, 3 WAY THROW	AES INDUSTRIES ADB-1-30-3			C
DB-3	DRYBOX DIFFUSER, 2 WAY ADJACENT THROW	AES INDUSTRIES ADB-1-20-2B			C
DB-4	DRYBOX DIFFUSER, 2 WAY OPPOSED THROW	AES INDUSTRIES ADB-1-20-2A			C
DB-5	DRYBOX DIFFUSER, 3 WAY THROW	AES INDUSTRIES ADB-1-30-3			C

EQUIPMENT MARK	DESCRIPTION	LOCATION	STATUS	WEIGHT (lb)	MANUFACTURER	MODEL	EMERGENCY	VOLTS	PHASE	CFM (cfm)	ESP (in WC)	FLA (amps)	MCA (amps)	OCF (amps)
K1A	COMMERCIAL KITCHEN HOOD AND DUCTWORK			114	FAIRFAX	802-ND-2	0	120	1	100	0	1	1	0
K1B	COMMERCIAL KITCHEN HOOD AND DUCTWORK			87	FAIRFAX	802-ND-2	0	120	1	100	0	1	1	0
K1C	COMMERCIAL KITCHEN HOOD AND DUCTWORK			87	FAIRFAX	802-ND-2	0	120	1	100	0	1	1	0

EQUIPMENT MARK	DESCRIPTION	LOCATION	STATUS	WEIGHT (lb)	MANUFACTURER	MODEL	EMERGENCY	VOLTS	PHASE	CFM (cfm)	ESP (in WC)	FLA (amps)	MCA (amps)	OCF (amps)
A1	MOTOR DAMPER													
A2	ECONOMIZER													
A3	ROOF CURB													
A4	SMOKE DETECTOR													
A5	INTAKE HOOD													
A6	VIBRATION ISOLATION													
A7	FLAT FILTER													
A8	FILTER/MIXING BOX													
A9	ACCESS DOOR													
A10	FLEX CONNECTIONS													
A11	MOUNTING COLLAR													
A12	HOT GAS BYPASS													
A13	FACE/BYPASS DAMPER													
A14	CONDENSATE PUMP													
A15	MOTOR GUARD													
A16	GREASE TRAP													
A17	DUCT FLANGES													
A18	ECON POWERED EXHAUST													
A19	BASE RAIL													
A20	ECON BAROMETRIC RELIEF													
A21	LINE VOLTAGE CONTROL													
A22	LINE VOLTAGE CONTROL													
A23	REVERSE ACTING LINE VOLTAGE THERMOSTAT													
A24	FIRE ALARM													
A25	CARBON MONOXIDE DETECTOR													