

Report By:

National TAB
1329 E Kemper Rd, Ste 4210
Cincinnati, OH 45246



Report: Test and Balance
Date: 3/30/2016

PROJECT

KROGER 034-591 BURLESON, TX (NEW STORE)

1631 SW Wilshire Blvd
Burleson, TX 76028

Client

Kroger Division 034
1331 E. Airport Frwy
Irving, TX 75062

Powered by



FACILIBUILD

www.facilibuild.com

National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

Table Of Contents

Section	Page #
Summary Data	3
Site pictures	4
GRD layout	8
AHU/RTU	16
FAN - Exhaust	45
Kitchen Hood Type I	59
Kitchen Hood Type II	64
Traverse Data	65



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)



Project Summary

PUNCHLIST ITEMS:

1. All filters are dirty and need to be changed.
2. EF-15 (Deli Fryers) has screws sticking up from the curb preventing the fan from setting flush. Significant leakage was observed. The leakage was temporarily sealed with foil tape for testing, but the screws need to be ground down so the fan will sit properly on the curb.
3. RTU-4 (Breakroom/Conference Room) is 85% of design with the motor operating at 60 HZ. After balancing consulted with Aeon. It was learned that the frequency can be increased to 64 HZ. Doing so will increase the airflow within +/-10%. National TAB to return to increase frequency so that airflow will be within design.



Store Front



Hood 1



Hood 2



Hood 3 R & L



Hood 5



Hood 4



Bakery ovens



Typical 5 ton



Typical 10 ton



Typical 15 Ton



16 Ton



8 Ton



30 Ton



20 Ton



3 Ton



DR10FA



DR12FA



NCA16FA



Typical NCA14FA



Typical NCA14HPFA

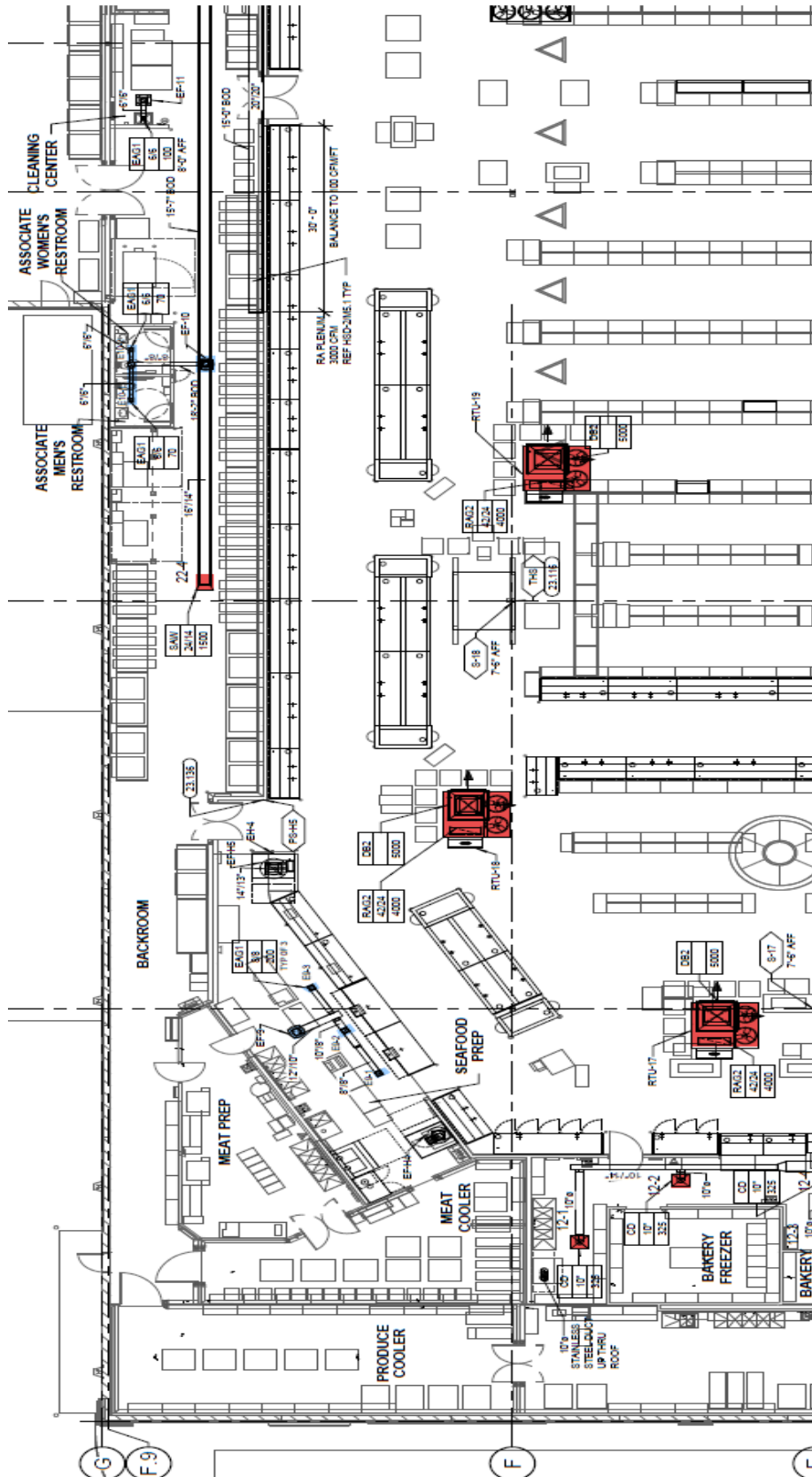


DU33HFA

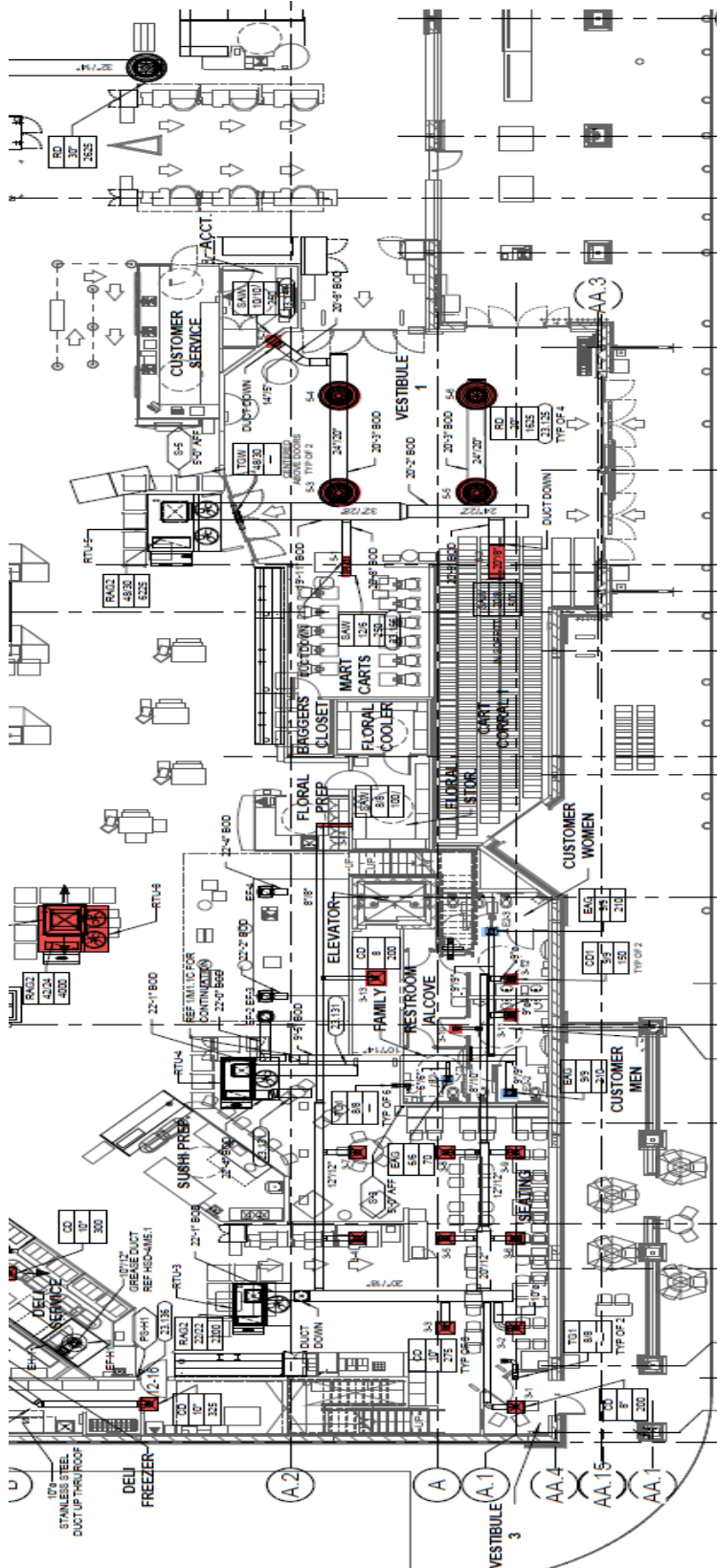


NCA18HPFA

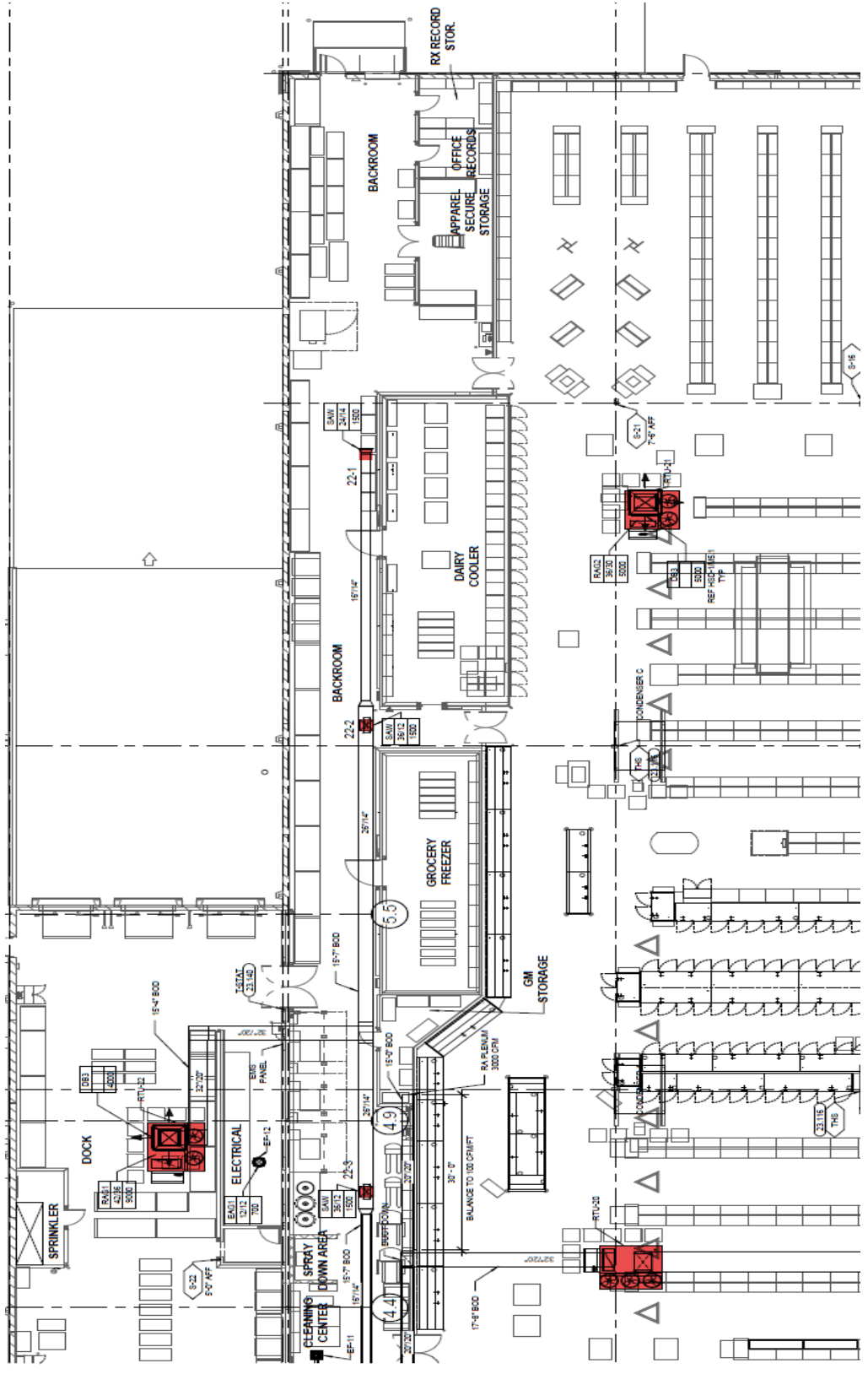
HVAC Plan - East



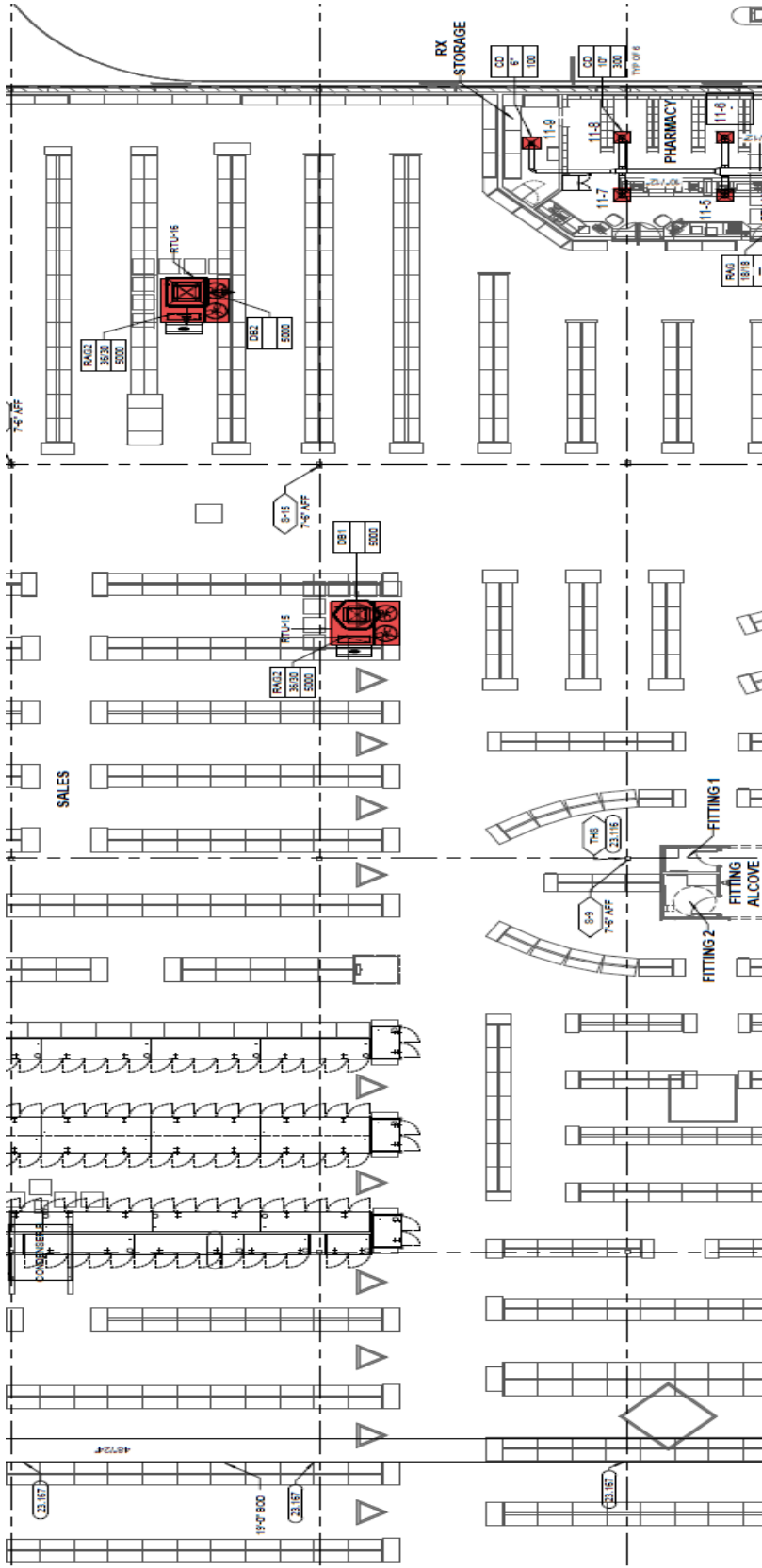
HVAC Plan - East (cont'd)



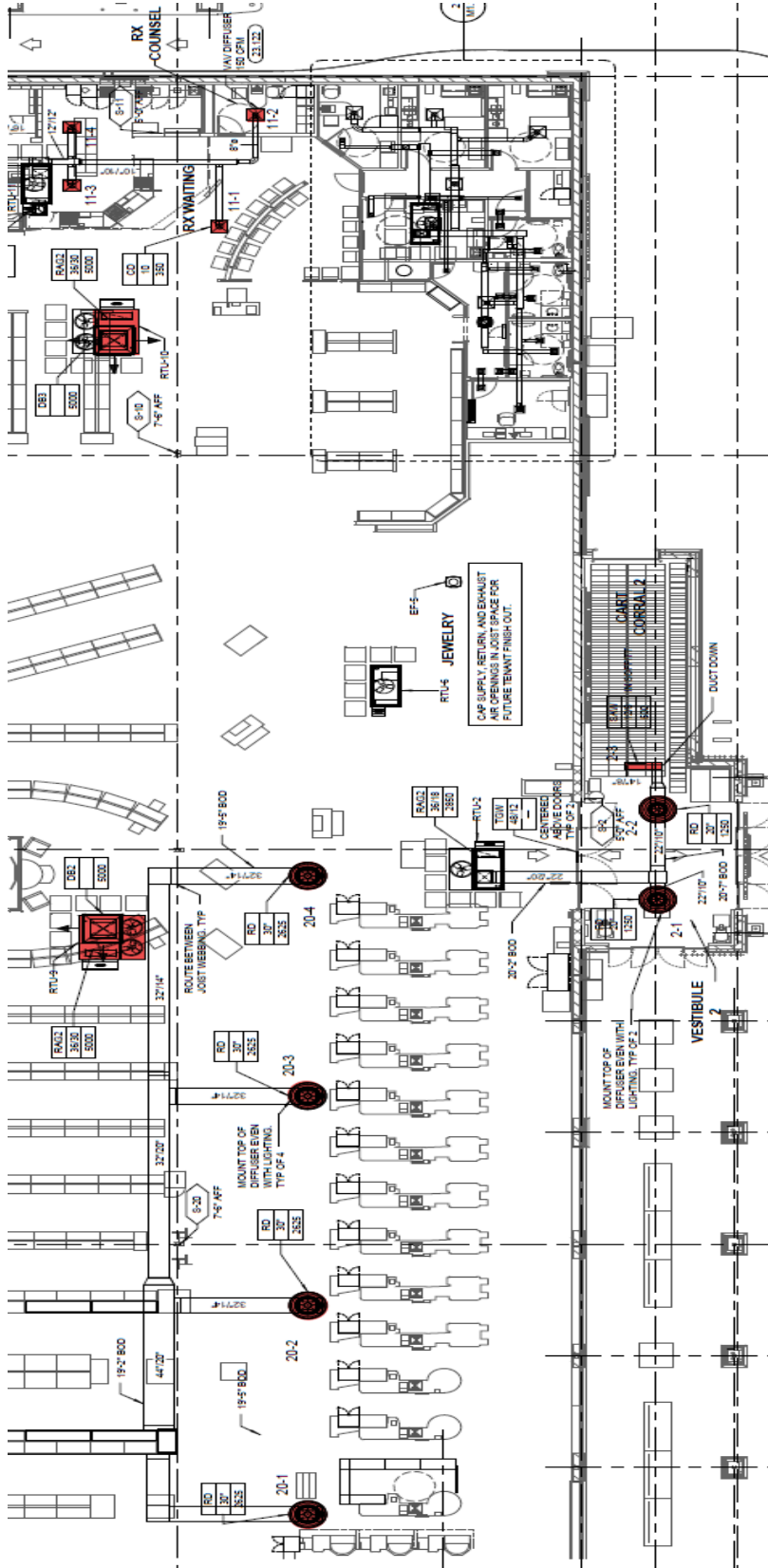
HVAC Plan - West



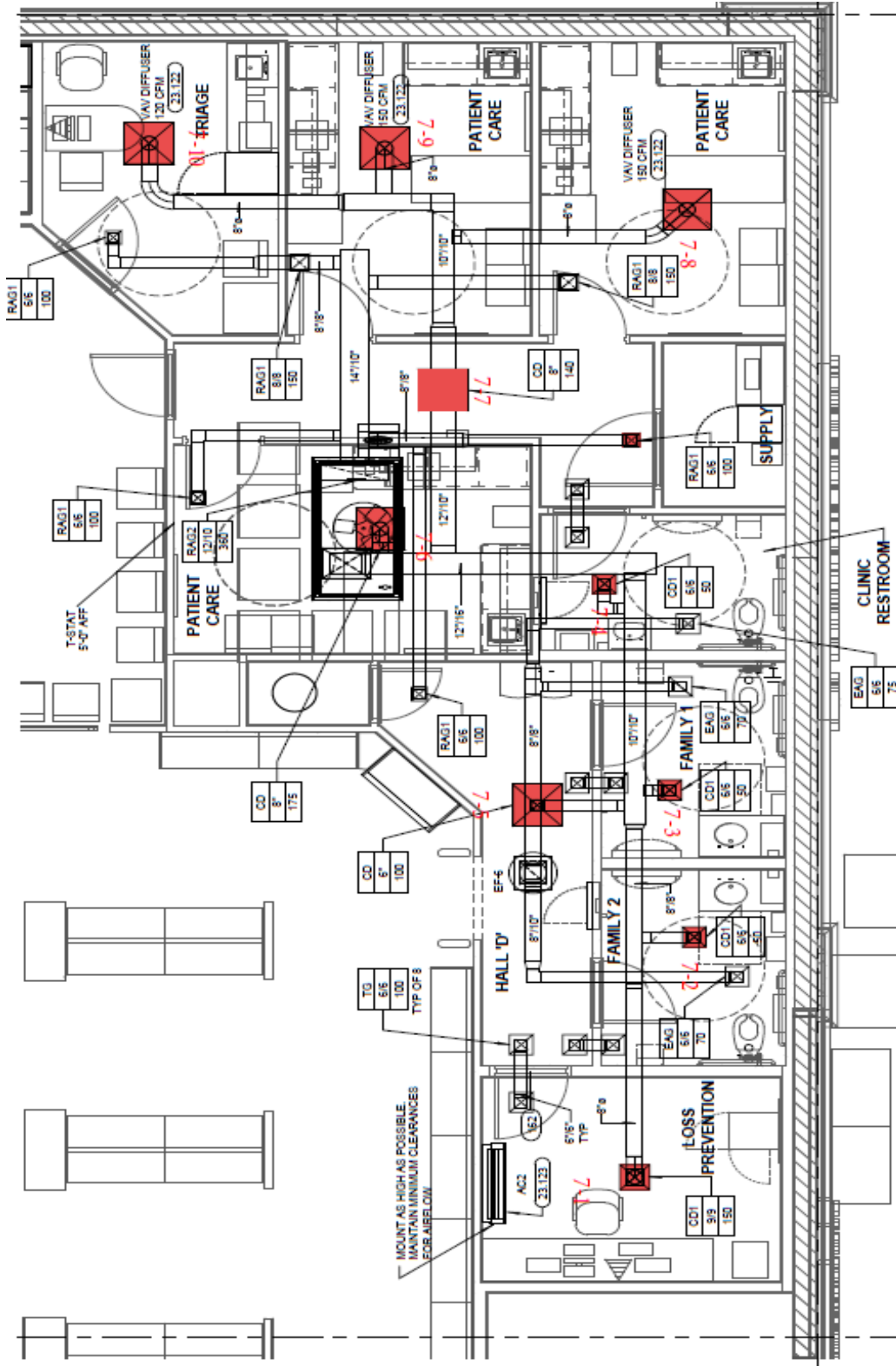
HVAC Plan - West (cont'd)



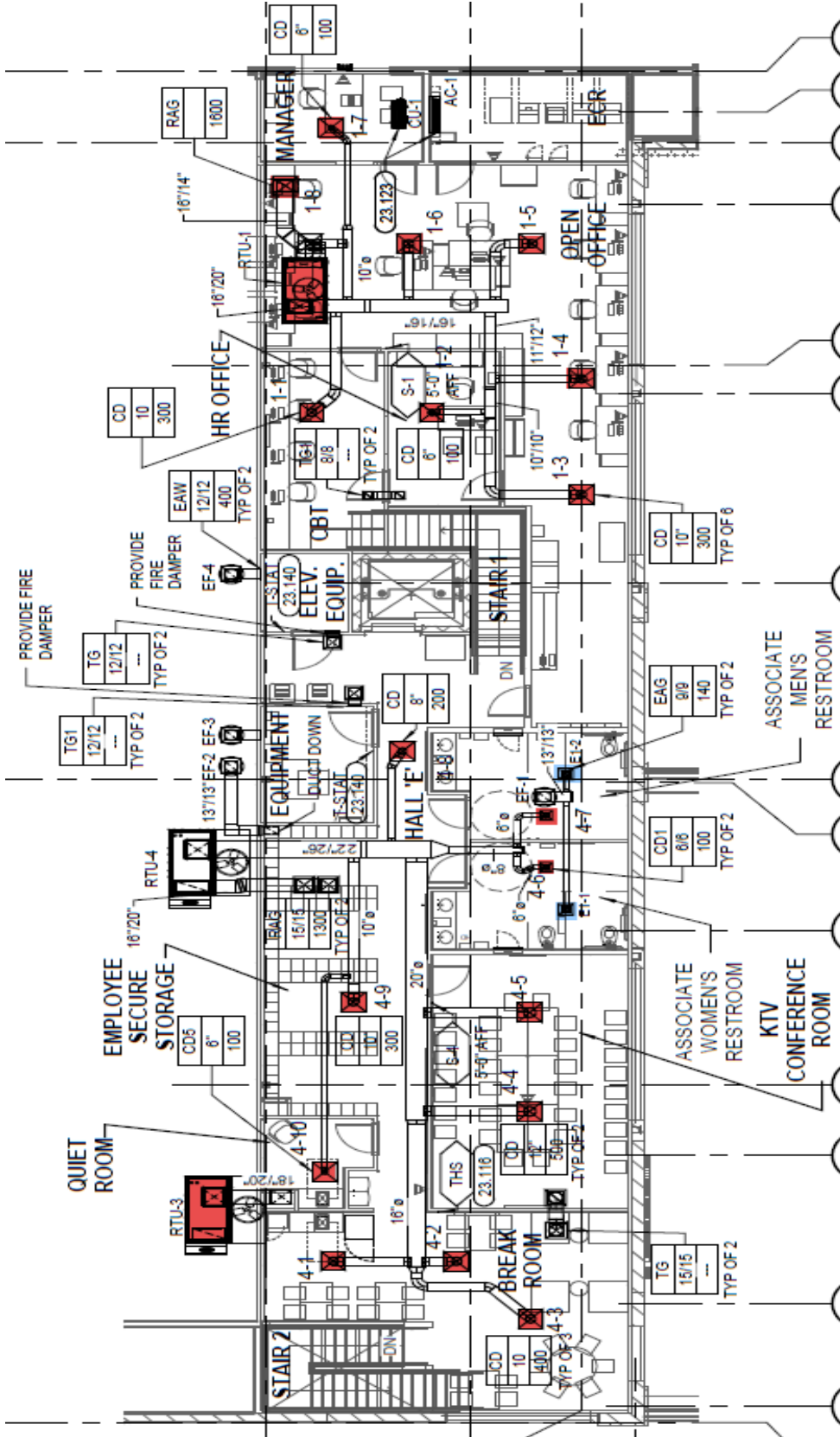
HVAC Plan - West (cont'd)



The Little Clinic



Mezzanine





National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU1

AREA: MEZZ OFFICE

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RQA-005	RQ-005
Serial Num	-	201506-AYGE09788
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	20" X 20"
Num Final Filter 1	-	2
Final Filter Size 1	-	20" X 20" X 2"

Test Data		
	Design	Actual
SF CFM	2000	2003
SF RPM	-	1800
RA CFM	1600	1562
OA CFM	400	438
RL Voltage	-	414
RL Amperage	-	2.9
SF Rotation	-	CW
OA Damper Position	-	25%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	56Z
Horsepower	2	2
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	6.8-6.3/3.15	6.8-6.3/3.15
Service Factor	-	1.15
Efficiency	-	84
Power Factor	-	71

Performance Data		
	Design	Actual
MA Plenum SP	-	-1.59"
Fan Suction SP	-	-1.60"
Fan Discharge SP	-	0.65"
Total ESP	0.20"	1.14"
Fan Total SP	-	2.25"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	488/491/491
VFD Min Setpt	-	55
VFD Max Setpt	-	60
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes: STATIC PRESSURES TAKEN WITHOUT FILTERS INSTALLED.



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Diffuser Supply (GRD)

AHU1 / MEZZ OFFICE

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
AHU1-SGRD1	CBT	CD	10"	300		140	159	276	92.0
AHU1-SGRD2	CBT	CD	6"	100		210	251	93	93.0
AHU1-SGRD3	MEZZ OFFICE	CD	10"	300		240	284	282	94.0
AHU1-SGRD4	MEZZ OFFICE	CD	10"	300		188	229	324	108.0
AHU1-SGRD5	MEZZ OFFICE	CD	10"	300		323	404	283	94.3
AHU1-SGRD6	MEZZ OFFICE	CD	10"	300		93	384	329	109.7
AHU1-SGRD7	MANAGER	CD	6"	100		352	185	106	106.0
AHU1-SGRD8	MEZZ OFFICE	CD	10"	300		105	130	310	103.3

Completed By: Brian Irvin on 11/17/2015

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU2

AREA: VESTIBULE #2

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-008	RN-008
Serial Num	-	201506- ANGH43474
Inventory Tag ID	-	
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	40.25" X 19.5"
Num Final Filter 1	-	4
Final Filter Size 1	-	16" X 20" X 2"

Test Data		
	Design	Actual
SF CFM	3000	3029
SF RPM	-	1680
RA CFM	2850	2871
OA CFM	150	158
RL Voltage	-	410
RL Amperage	-	2.1
SF Rotation	-	CW
OA Damper Position	-	0.25"
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	E143/5T
Horsepower	2	2
Motor Rpm	1730	1730
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	5.95-5.60/2.90	5.95-5.60/2.90
Service Factor	-	1.15
Efficiency	-	86.5
Power Factor	-	78

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.31"
Fan Suction SP	-	-0.49"
Fan Discharge SP	-	0.21"
Total ESP	0.25"	0.52"
Fan Total SP	-	0.70"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	483/489/488
VFD Min Setpt	-	56
VFD Max Setpt	-	56HZ
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Diffuser Supply (GRD)

AHU2 / VESTIBULE #2

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
AHU2-SGRD1	VESTIBULE #2	RD	20"	1250		1520	1488	1279	102.3
AHU2-SGRD2	VESTIBULE #2	RD	20"	1250		1169	1120	1244	99.5
AHU2-SGRD3	VESTIBULE #2	SAW	12" X 8"	500		538	489	506	101.2

Completed By: Brian Irvin on 11/19/2015

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU3

AREA: SEATING/ PUBLIC RR'S

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-010	RN-010
Serial Num	-	201506-ANGJ43475
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	40" X 19.5"
Num Final Filter 1	-	4
Final Filter Size 1	-	16" X 20" X 2"

Test Data		
	Design	Actual
SF CFM	3000	3116
SF RPM	-	1800
RA CFM	2200	2282
OA CFM	800	834
RL Voltage	-	439
RL Amperage	-	2.2
SF Rotation	-	CW
OA Damper Position	-	50%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	E143/5T
Horsepower	2	2
Motor Rpm	1730	1730
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	5.95-5.8/2.9	5.95-5.8/2.9
Service Factor	-	1.15
Efficiency	-	86.5
Power Factor	-	78

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.27"
Fan Suction SP	-	-0.41"
Fan Discharge SP	-	0.29"
Total ESP	0.30"	0.56"
Fan Total SP	-	0.70"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	488/491/490
VFD Min Setpt	-	60
VFD Max Setpt	-	60HZ
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	488/491/490
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Diffuser Supply (GRD)

AHU3 / SEATING / PUBLIC RR'S

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
AHU3-SGRD1	SEATING	CD	10"	200		53	130	189	94.5
AHU3-SGRD2	SEATING	CD	10"	275		348	303	274	99.6
AHU3-SGRD3	SEATING	CD	10"	275		78	318	279	101.5
AHU3-SGRD4	SEATING	CD	10"	275		60	247	266	96.7
AHU3-SGRD5	SEATING	CD	10"	275		240	264	284	103.3
AHU3-SGRD6	SEATING	CD	10"	275		244	263	291	105.8
AHU3-SGRD7	SEATING	CD	10"	275		34	196	286	104.0
AHU3-SGRD8	SEATING	CD	10"	275		257	260	275	100.0
AHU3-SGRD9	SEATING	CD	10"	275		233	244	271	98.5
AHU3-SGRD10	RESTROOM	CD1	6"			95	98	102	-
AHU3-SGRD11	RESTROOM	CD1	9"	150		144	166	150	100.0
AHU3-SGRD12	RESTROOM	CD1	9"	150		136	184	141	94.0
AHU3-SGRD13	SEATING / PUBLIC RR'S	CD	8"	200		286	306	206	103.0
AHU3-SGRD14	SEATING / PUBLIC RR'S	SAW	8" X 8"	100		129	151	102	102.0

Completed By: Brian Irvin on 11/17/2015

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU4

AREA: BREAKROOM/CONFERENCE ROOM

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-010	RN-010
Serial Num	-	201506-ANGJ43476
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	40" X 19.5"
Num Final Filter 1	-	4
Final Filter Size 1	-	16" X 20" X 2"

Test Data		
	Design	Actual
SF CFM	3000	2534
SF RPM	-	1800
RA CFM	2600	2118
OA CFM	400	416
RL Voltage	-	429
RL Amperage	-	2.1
SF Rotation	-	CW
OA Damper Position	-	30%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	E143/5T
Horsepower	2	2
Motor Rpm	1730	1730
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	5.95-5.8/2.9	5.95-5.8/2.9
Service Factor	-	1.15
Efficiency	-	86.5
Power Factor	-	78

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.38"
Fan Suction SP	-	-0.64"
Fan Discharge SP	-	0.37"
Total ESP	0.30"	0.75"
Fan Total SP	-	1.01"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	482/486/487
VFD Min Setpt	-	60
VFD Max Setpt	-	60
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	482/486/487
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLERSON, TX (NEW STORE)

System/Unit: AHU/RTU



Diffuser Supply (GRD)

AHU4 / BREAKROOM/CONFERENCE ROOM

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
AHU4-SGRD1	BREAK ROOM	CD	10"	400		270	291	342	85.5
AHU4-SGRD2	BREAK ROOM	CD	10"	400		169	286	334	83.5
AHU4-SGRD3	BREAK ROOM	CD	10"	400		267	296	338	84.5
AHU4-SGRD4	BREAKROOM/CONFERENCE ROOM	CD	12"	500		300	339	421	84.2
AHU4-SGRD5	BREAKROOM/CONFERENCE ROOM	CD	12"	500		433	487	413	82.6
AHU4-SGRD6	RESTROOM	CD1	6" X 6"	100		133	155	86	86.0
AHU4-SGRD7	RESTROOM	CD1	6" X 6"	100		125	132	88	88.0
AHU4-SGRD8	BREAKROOM/CONFERENCE ROOM	CD	10"	200		218	244	174	87.0
AHU4-SGRD9	BREAKROOM/CONFERENCE ROOM	CD	10"	300		234	253	253	84.3
AHU4-SGRD10	BREAKROOM/CONFERENCE ROOM	CD5	6"	100		65	68	85	85.0

Completed By: Brian Irvin on 11/17/2015

Asset	Area Served	Notes
-------	-------------	-------



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU5

AREA: VESTIBULE #1

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-016	RN-016
Serial Num	-	201506-BNGM44373
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	60" X 31"
Num Final Filter 1	-	9
Final Filter Size 1	-	16" X 20" X 2"

Test Data		
	Design	Actual
SF CFM	7500	7605
SF RPM	-	1040
RA CFM	6225	6303
OA CFM	1275	1302
RL Voltage	-	370
RL Amperage	-	6.2
SF Rotation	-	CW
OA Damper Position	-	35%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	215T
Horsepower	10	10
Motor Rpm	1770	1770
Phase	3	3
Rated Voltage	230/460	230/460
Rated Amperage	25/12.5	25/12.5
Service Factor	-	1.15
Efficiency	-	91.7
Power Factor	-	82

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.29"
Fan Suction SP	-	-0.38"
Fan Discharge SP	-	0.27"
Total ESP	0.35"	0.56"
Fan Total SP	-	0.65"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	483/487/486
VFD Min Setpt	-	60
VFD Max Setpt	-	60
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLERSON, TX (NEW STORE)

System/Unit: AHU/RTU



Diffuser Supply (GRD)

AHU5 / VESTIBULE #1

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
AHU5-SGRD1	CARTS	SAW	12" X 6"	250		316	244	244	97.6
AHU5-SGRD2	CARTS	SAW	20" X 8"	500		508	519	519	103.8
AHU5-SGRD3	VESTIBULE 1	RD	20"	1625		1646	1656	1656	101.9
AHU5-SGRD4	VESTIBULE 1	RD	20"	1625		1984	1640	1640	100.9
AHU5-SGRD5	VESTIBULE 1	RD	20"	1625		1915	1599	1599	98.4
AHU5-SGRD6	VESTIBULE 1	RD	20"	1625		864	1604	1604	98.7
AHU5-SGRD7	ACCT.	SAW	10" X 10"	250		333	264	264	105.6

Completed By: Brian Irvin on 11/19/2015

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU8

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL44356
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	4895
SF RPM	-	1485
RA CFM	4000	3920
OA CFM	1000	975
RL Voltage	-	362
RL Amperage	-	3.6
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.13"
Fan Suction SP	-	-0.26"
Fan Discharge SP	-	0.10"
Total ESP	0.35"	0.23"
Fan Total SP	-	0.36"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	479/484/483
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU9

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL43459
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	5401
SF RPM	-	1485
RA CFM	5000	5401
OA CFM	0	0
RL Voltage	-	377
RL Amperage	-	3.7
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.11"
Fan Suction SP	-	-0.24"
Fan Discharge SP	-	0.13"
Total ESP	0.35"	0.24"
Fan Total SP	-	0.37"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	479/483/482
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU10

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL43464
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	5428
SF RPM	-	1485
RA CFM	5000	5428
OA CFM	0	0
RL Voltage	-	378
RL Amperage	-	3.9
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.16"
Fan Suction SP	-	-0.28"
Fan Discharge SP	-	0.17"
Total ESP	0.25"	0.33"
Fan Total SP	-	0.45"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	481/485/483
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU11

AREA: PHARMACY

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RQA-005	RQ-005
Serial Num	-	201506- ANGH43477
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	20" X 20"
Num Final Filter 1	-	2
Final Filter Size 1	-	20" X 20" X 2"

Test Data		
	Design	Actual
SF CFM	2400	2413
SF RPM	-	1800
RA CFM	1920	1915
OA CFM	480	498
RL Voltage	-	449
RL Amperage	-	2.2
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	56Z
Horsepower	2	2
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	6.8-6.3/3.15	6.8-6.3/3.15
Service Factor	-	1.15
Efficiency	-	84
Power Factor	-	71

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.32"
Fan Suction SP	-	-0.56"
Fan Discharge SP	-	-0.41"
Total ESP	0.20"	0.73"
Fan Total SP	-	0.97"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	487/490/490
VFD Min Setpt	-	60
VFD Max Setpt	-	60
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Diffuser Supply (GRD)

AHU11 / PHARMACY

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
AHU11-SGRD1	PHARMACY	CD	10"	350		326	344	356	101.7
AHU11-SGRD2	PHARMACY	CD	8"	150		189	158	148	98.7
AHU11-SGRD3	PHARMACY	CD	10"	300		254	268	302	100.7
AHU11-SGRD4	PHARMACY	CD	10"	300		263	271	304	101.3
AHU11-SGRD5	PHARMACY	CD	10"	300		288	301	291	97.0
AHU11-SGRD6	PHARMACY	CD	10"	300		406	334	286	95.3
AHU11-SGRD7	PHARMACY	CD	10"	300		359	326	306	102.0
AHU11-SGRD8	PHARMACY	CD	10"	300		327	314	312	104.0
AHU11-SGRD9	PHARMACY	CD	6"	100		54	129	108	108.0

Completed By: Brian Irvin on 11/19/2015

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU12

AREA: BAKERY/DELI

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL44357
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	5014
SF RPM	-	1485
RA CFM	4000	3916
OA CFM	1000	1098
RL Voltage	-	439
RL Amperage	-	4.3
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.32"
Fan Suction SP	-	-0.56"
Fan Discharge SP	-	0.38"
Total ESP	0.45"	0.59"
Fan Total SP	-	0.94"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	485/488/488
VFD Min Setpt	-	55
VFD Max Setpt	-	55
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLERSON, TX (NEW STORE)

System/Unit: AHU/RTU



Diffuser Supply (GRD)

AHU12 / BAKERY/DELI

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
AHU12-SGRD1	BAKERY	CD	10"	325		403	361	331	101.8
AHU12-SGRD2	BAKERY	CD	10"	325		421	358	324	99.7
AHU12-SGRD3	BAKERY	CD	10"	325		286	303	320	98.5
AHU12-SGRD4	BAKERY	CD	10"	325		245	297	306	94.2
AHU12-SGRD5	BAKERY	CD	10"	325		238	294	311	95.7
AHU12-SGRD6	BAKERY	CD	10"	325		296	311	338	104.0
AHU12-SGRD7	ORDERING OFFICE	SAW	12" X 10"	400		474	356	420	105.0
AHU12-SGRD8	ORDERING OFFICE	CD1	6"	100		205	122	107	107.0
AHU12-SGRD9	DELI	CD3	12" X 12"	325		403	376	334	102.8
AHU12-SGRD10	DELI	CD	10"	325		352	327	309	95.1
AHU12-SGRD11	DELI	CD	10"	325		411	303	311	95.7
AHU12-SGRD12	DELI	CD	10"	300		215	309	304	101.3
AHU12-SGRD13	DELI	CD	10"	325		366	382	338	104.0
AHU12-SGRD14	DELI	CD	10"	300		389	324	319	106.3
AHU12-SGRD15	DELI	CD	10"	325		145	269	300	92.3
AHU12-SGRD16	DELI	CD	10"	325		196	328	342	105.2

Completed By: Brian Irvin on 11/19/2015

Asset	Area Served	Notes
-------	-------------	-------



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU13

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL43465
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	4629
SF RPM	-	1485
RA CFM	4000	3709
OA CFM	1000	920
RL Voltage	-	376
RL Amperage	-	3.9
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.14"
Fan Suction SP	-	-0.25"
Fan Discharge SP	-	0.10"
Total ESP	0.25"	0.24"
Fan Total SP	-	0.35"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	486/489/488
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU14

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL43466
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	4818
SF RPM	-	1485
RA CFM	4000	3793
OA CFM	1000	1025
RL Voltage	-	395
RL Amperage	-	4.3
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.14"
Fan Suction SP	-	-0.28"
Fan Discharge SP	-	0.12"
Total ESP	0.25"	0.26"
Fan Total SP	-	0.40"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	486/489/489
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU15

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL43467
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	4724
SF RPM	-	1485
RA CFM	5000	4724
OA CFM	0	0
RL Voltage	-	376
RL Amperage	-	3.7
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.11"
Fan Suction SP	-	-0.23"
Fan Discharge SP	-	0.14"
Total ESP	0.25"	0.25"
Fan Total SP	-	0.37"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	485/489/487
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU16

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL43468
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	4818
SF RPM	-	1485
RA CFM	5000	4818
OA CFM	0	0
RL Voltage	-	378
RL Amperage	-	3.8
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.13"
Fan Suction SP	-	-0.24"
Fan Discharge SP	-	0.13"
Total ESP	0.25"	0.26"
Fan Total SP	-	0.37"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	481/485/484
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU17

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL44196
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	4532
SF RPM	-	1485
RA CFM	4000	3567
OA CFM	1000	965
RL Voltage	-	398
RL Amperage	-	3.5
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.12"
Fan Suction SP	-	-0.23"
Fan Discharge SP	-	0.11"
Total ESP	0.45"	0.23"
Fan Total SP	-	0.34"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	484/488/487
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU18

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL44197
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	5000
SF RPM	-	1485
RA CFM	4000	4085
OA CFM	1000	915
RL Voltage	-	395
RL Amperage	-	4.3
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.15"
Fan Suction SP	-	-0.26"
Fan Discharge SP	-	0.13"
Total ESP	0.45"	0.28"
Fan Total SP	-	0.39"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	485/486/489
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU19

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL45589
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	4629
SF RPM	-	1485
RA CFM	4000	3591
OA CFM	1000	1038
RL Voltage	-	380
RL Amperage	-	3.9
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.14"
Fan Suction SP	-	-0.25"
Fan Discharge SP	-	0.10"
Total ESP	0.45"	0.24"
Fan Total SP	-	0.35"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	488/491/491
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU20

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-030	RN-030
Serial Num	-	201506-BNGT44374
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	60" X 31"
Num OA Filters 2	-	-
OA Filter Size 2	-	-
Num Final Filter 1	-	9
Final Filter Size 1	-	16" X 20" X 2"
Num Final Filter 2	-	-
Final Filter Size 2	-	-

Test Data		
	Design	Actual
SF CFM	10000	10516
SF RPM	-	1575
RA CFM	8000	7815
OA CFM	2000	2185
RL Voltage	-	357
RL Amperage	-	8.7
SF Rotation	-	CW
RA Damper Position	-	NA
RA Damper Type	-	NA
OA Damper Position	-	0.75"
OA Damper Type	-	ACTUATED BLADE

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.58"
Fan Suction SP	-	-0.99"
Fan Discharge SP	-	0.67"
Total ESP	0.70"	1.25"
Fan Total SP	-	1.66"

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	254T
Horsepower	15	15
Motor Rpm	1765	1765
Phase	3	3
Rated Voltage	480	230/460
Rated Amperage	35.4/17.7	35.4/17.7
Service Factor	-	1.15
Efficiency	-	93
Power Factor	-	86

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	485/489/489
VFD Min Setpt	-	52.5
VFD Max Setpt	-	52.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes: TRAVERSE TAKEN FOR TOTAL CFM. STATIC PRESSURES WERE TAKEN ON EACH DIFFUSER TO BALANCE INDIVISUAL CFM.



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Diffuser Supply (GRD)

AHU20 / SALES

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
AHU20-SGRD1	SALES	RD	30"	2625		2411	2558	2637	100.5
AHU20-SGRD2	SALES	RD	30"	2625		2268	2402	2621	99.8
AHU20-SGRD3	SALES	RD	30"	2625		2644	2805	2634	100.3
AHU20-SGRD4	SALES	RD	30"	2625		2637	2789	2624	100.0

Completed By: Brian Irvin on 11/17/2015

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU21

AREA: SALES

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-015	RN-015
Serial Num	-	201506-ANGL43469
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	50.5" X 25"
Num Final Filter 1	-	4
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	5000	5089
SF RPM	-	1485
RA CFM	5000	5089
OA CFM	0	0
RL Voltage	-	381
RL Amperage	-	3.9
SF Rotation	-	CW
OA Damper Position	-	40%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	184T
Horsepower	5	5
Motor Rpm	1755	1755
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	13.6-12.6/6.3	13.6-12.6/6.3
Service Factor	-	1.15
Efficiency	-	89.5
Power Factor	-	83

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.15"
Fan Suction SP	-	-0.23"
Fan Discharge SP	-	0.14"
Total ESP	0.25"	0.29"
Fan Total SP	-	0.37"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	487/490/490
VFD Min Setpt	-	49.5
VFD Max Setpt	-	49.5
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: AHU/RTU



Asset: AHU22

AREA: DOCK/BACKROOM

Unit Data		
	Design	Actual
MFG	AAON	AAON
Model Num	RN-020	RN-020
Serial Num	-	201506-BNGP43482
Inventory Tag ID	-	-
Type	RTU	RTU
Configuration	DOWN DISCHARGE	DOWN DISCHARGE
Num OA Filters 1	-	1
OA Filter Size 1	-	60" X 31"
Num Final Filter 1	-	6
Final Filter Size 1	-	20" X 25" X 2"

Test Data		
	Design	Actual
SF CFM	6000	5985
SF RPM	-	1110
RA CFM	5000	4900
OA CFM	1000	1085
RL Voltage	-	219
RL Amperage	-	5.9
SF Rotation	-	CW
OA Damper Position	-	30%
OA Damper Type	-	ACTUATED BLADE

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	215T
Horsepower	5	5
Motor Rpm	1160	1160
Phase	3	3
Rated Voltage	208-230/460	208-230/460
Rated Amperage	15.2-14.8/7.4	15.2-14.8/7.4
Service Factor	-	89.5
Efficiency	-	71
Power Factor	-	1.15

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.27"
Fan Suction SP	-	-0.42"
Fan Discharge SP	-	0.34"
Total ESP	0.55"	0.61"
Fan Total SP	-	0.76"

Electrical		
	Design	Actual
VFD Phase Voltage (line)	-	488/491/492
VFD Min Setpt	-	45
VFD Max Setpt	-	45
Phase Brownout Dial Setpt (v)	-	490
Phase Brownout Volt Variance	-	10
Freeze Stat Setpt	-	NONE
Compressor Lockout Setpt	-	45

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLERSON, TX (NEW STORE)

System/Unit: AHU/RTU



Diffuser Supply (GRD)

AHU22 / DOCK/BACKROOM

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
AHU22-SGRD1	DOCK/BACKROOM	SAW	24" X 14"	1500		1253	1503	1488	99.2
AHU22-SGRD2	DOCK/BACKROOM	SAW	36" X 12"	1500		1247	1496	1506	100.4
AHU22-SGRD3	DOCK/BACKROOM	SAW	36" X 12"	1500		1420	1638	1505	100.3
AHU22-SGRD4	DOCK/BACKROOM	SAW	24" X 14"	1500		1212	1418	1486	99.1

Completed By: Brian Irvin on 11/17/2015

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF1

AREA: MEZZ RESTROOM

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Test Data		
	Design	Actual
CFM	280	272
Fan RPM	DIRECT DRIVE	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	HIGH (100%)
RL Voltage	-	120
RL Amperage	-	0.8
Total ESP	0.25"	0.19"
Fan Inlet SP	-	-0.19"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Frame	-	42Y
Horsepower	0.167	0.167
Motor Rpm	1625	1625
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.9
Service Factor	-	1.0

Completed By: Kyle Olson on 03/15/2016

Notes:

Diffuser Ret/Exh (GRD)

EF1 / MEZZ RESTROOM

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EF1-EGRD1	MEZZ RESTROOM			140		110		135	96.4
EF1-EGRD2	MEZZ RESTROOM			140		112		137	97.9

Completed By: Taylor Long on

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF2

AREA: PUBLIC RESTROOM

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Test Data		
	Design	Actual
CFM	490	446
Fan RPM	DIRECT DRIVE	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	100%
RL Voltage	-	120
RL Amperage	-	1.7
Total ESP	0.25"	0.25"
Fan Inlet SP	-	-0.25"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Frame	-	42Y
Horsepower	0.167	0.167
Motor Rpm	1625	1625
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.9
Service Factor	-	1.0

Completed By: Kyle Olson on 03/15/2016

Notes:

Diffuser Ret/Exh (GRD)

EF2 / PUBLIC RESTROOM

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EF2-EGRD1	PUBLIC RESTROOM			70		99	65	65	92.9
EF2-EGRD2	PUBLIC RESTROOM			210		178	191	191	91.0
EF2-EGRD3	PUBLIC RESTROOM			210		159	190	190	90.5

Completed By: Taylor Long on

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF6

AREA: FAMILY RESTROOM

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DR12HFA	DR10HFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Test Data		
	Design	Actual
CFM	210	223
Fan RPM	DIRECT DRIVE	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	HIGH (100%)
RL Voltage	-	120
RL Amperage	-	0.5
Total ESP	0.13"	0.38"
Fan Inlet SP	-	-0.38"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Frame	-	42Y
Horsepower	0.167	1/15
Motor Rpm	1625	1625
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	0.94
Service Factor	-	1.0

Completed By: Kyle Olson on 03/16/2016

Notes: Balanced



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF7

AREA: BAKERY OVEN

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	NCA14HPFA	NCA14HPFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Test Data		
	Design	Actual
CFM	900	905
Fan RPM	-	1294
Fan Rotation	-	CCW
Motor RPM	-	1750
System SetPt	-	BELT DRIVEN
RL Voltage	-	119
RL Amperage	-	5.7
Total ESP	1.20"	0.71"
Fan Inlet SP	-	-0.71"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	56
Horsepower	0.5	0.5
Motor Rpm	1730	1730
Phase	1	1
Voltage (rated)	120	115/208-230
Amperage (rated)	-	7.7/4.3-3.9
Service Factor	-	1.35

Drive Data		
	Design	Actual
Motor Sheave Size	-	VL40
Motor Bore Size	-	0.625"
Motor Sheave SetPt	-	3.11"
Fan Sheave Size	-	AK46
Fan Sheave Bore	-	1"
Belt CL Distance	-	7.25"
Num of Belts	-	1
Belt Size	-	AX22

Completed By: Kyle Olson on 03/16/2016

Notes: balanced



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF8

AREA: BAKERY OVEN

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	NCA14HPFA	NCA14HPFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Test Data		
	Design	Actual
CFM	900	926
Fan RPM	-	1308
Fan Rotation	-	CCW
Motor RPM	-	1745
System SetPt	-	BELT DRIVEN
RL Voltage	-	120
RL Amperage	-	5.9
Total ESP	1.20"	0.75"
Fan Inlet SP	-	-0.75"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	56
Horsepower	0.5	0.5
Motor Rpm	1730	1730
Phase	1	1
Voltage (rated)	120	115/208-230
Amperage (rated)	-	7.7/4.3-3.9
Service Factor	-	1.35

Drive Data		
	Design	Actual
Motor Sheave Size	-	VL40
Motor Bore Size	-	0.625"
Motor Sheave SetPt	-	3.15"
Fan Sheave Size	-	AK46
Fan Sheave Bore	-	1"
Belt CL Distance	-	7.25"
Num of Belts	-	1
Belt Size	-	AX22

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF9

AREA: SEAFOOD PREP

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Test Data		
	Design	Actual
CFM	600	547
Fan RPM	DIRECT DRIVE	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	HIGH (100%)
RL Voltage	-	117
RL Amperage	-	1.7
Total ESP	0.25"	0.40"
Fan Inlet SP	-	-0.40"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Frame	-	42Y
Horsepower	0.167	0.167
Motor Rpm	1625	1625
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.9
Service Factor	-	1.0

Completed By: Kyle Olson on 03/16/2016

Notes: BALANCED

Diffuser Ret/Exh (GRD)

EF9 / SEAFOOD PREP

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EF9-EGRD1	SEAFOOD PREP			300		253		272	90.7
EF9-EGRD2	SEAFOOD PREP			300		313		275	91.7
EF9-EGRD3	SEAFOOD PREP	NA	NA						-

Completed By: Kyle Olson on 03/15/2016

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF10

AREA: REAR RESTROOM

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Test Data		
	Design	Actual
CFM	140	226
Fan RPM	DIRECT DRIVE	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	MINIMIZED
RL Voltage	-	106
RL Amperage	-	0.8
Total ESP	0.13"	0.23"
Fan Inlet SP	-	-0.23"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Frame	-	42Y
Horsepower	0.167	0.167
Motor Rpm	1625	1625
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.9
Service Factor	-	1.0

Completed By: Kyle Olson on 03/16/2016

Notes: MINIMIZED

Diffuser Ret/Exh (GRD)

EF10 / REAR RESTROOM

Asset	Area Served	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
EF10-EGRD1	REAR RESTROOM			70		123		123	175.7
EF10-EGRD2	REAR RESTROOM			70		103		103	147.1

Completed By: Taylor Long on

Asset	Area Served	Notes



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF11

AREA: CLEANING ROOM

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DR10HFA	DR10HFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Frame	-	42Y
Horsepower	0.067	0.067
Motor Rpm	1550	1550
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	0.94
Service Factor	-	1.0

Test Data		
	Design	Actual
CFM	100	92
Fan RPM	DIRECT DRIVE	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	MED HI (70%)
RL Voltage	-	104
RL Amperage	-	0.8
Total ESP	0.13"	0.22"
Fan Inlet SP	-	-0.22"
Fan Discharge SP	-	ATM

Completed By: Kyle Olson on 03/16/2016

Notes: BALANCED



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF12

AREA: ELECTRICAL ROOM

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	DOWNBLAST	DOWNBLAST

Motor Data		
	Design	Actual
Motor MFG	-	HSSA
Frame	-	42Y
Horsepower	0.167	0.167
Motor Rpm	1625	1625
Phase	1	1
Voltage (rated)	120	115
Amperage (rated)	-	1.9
Service Factor	-	1.0

Test Data		
	Design	Actual
CFM	700	689
Fan RPM	DIRECT DRIVE	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	HIGH
RL Voltage	-	119
RL Amperage	-	1.7
Total ESP	0.13"	0.28"
Fan Inlet SP	-	-0.28"
Fan Discharge SP	-	ATM

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF13

AREA: DELI FRYER

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	NCA14FA	NCA14FA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	UPBLAST	UPBLAST

Test Data		
	Design	Actual
CFM	1350	1406
Fan RPM	-	1034
Fan Rotation	-	CCW
Motor RPM	-	1735
RL Voltage	-	213/211/212
RL Amperage	-	1.4/1.4/1.4
Total ESP	0.75"	0.93"
Fan Inlet SP	-	-0.93"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	56
Horsepower	0.5	0.75
Motor Rpm	1730	1730
Phase	3	3
Voltage (rated)	208	208-230/460
Amperage (rated)	-	2.16-1.95/0.98
Service Factor	-	1.25

Drive Data		
	Design	Actual
Motor Sheave Size	-	3.75"
Motor Bore Size	-	0.625"
Motor Sheave SetPt	-	3.7"
Fan Sheave Size	-	6.5"
Fan Sheave Bore	-	0.75"
Belt CL Distance	-	5.5"
Num of Belts	-	1
Belt Size	-	AX23

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF14

AREA: DELI OVEN

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	NCA14FA	NCA14FA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	UPBLAST	UPBLAST

Test Data		
	Design	Actual
CFM	1800	1693
Fan RPM	-	1133
Fan Rotation	-	CCW
Motor RPM	-	1735
RL Voltage	-	210/210/209
RL Amperage	-	1.5/1.5/1.5
Total ESP	0.75"	0.87"
Fan Inlet SP	-	-0.87"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	56
Horsepower	0.5	0.75
Motor Rpm	1730	1730
Phase	3	3
Voltage (rated)	208	208-230/460
Amperage (rated)	-	2.16-1.95/0.98
Service Factor	-	1.25

Drive Data		
	Design	Actual
Motor Sheave Size	-	3.75"
Motor Bore Size	-	0.625"
Motor Sheave SetPt	-	3.75"
Fan Sheave Size	-	6.5"
Fan Sheave Bore	-	0.75"
Belt CL Distance	-	5.5"
Num of Belts	-	1
Belt Size	-	AX23

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF15

AREA: DELI FRYERS

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	NCA16FA	NCA16FA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	UPBLAST	UPBLAST

Test Data		
	Design	Actual
CFM	3150	3363
Fan RPM	-	1262
Fan Rotation	-	CCW
Motor RPM	-	1750
RL Voltage	-	211/210/209
RL Amperage	-	4.5/4.3/4.3
Total ESP	1.00"	0.77"
Fan Inlet SP	-	-0.77"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	56H
Horsepower	1.5	1.5
Motor Rpm	1745	1745
Phase	3	3
Voltage (rated)	208	208-230/460
Amperage (rated)	-	5.09-4.60/2.30
Service Factor	-	1.15

Drive Data		
	Design	Actual
Motor Sheave Size	-	VL40
Motor Bore Size	-	0.625"
Motor Sheave SetPt	-	3.6"
Fan Sheave Size	-	5.25"
Fan Sheave Bore	-	1"
Belt CL Distance	-	7"
Num of Belts	-	1
Belt Size	-	AX25

Completed By: Kyle Olson on 03/16/2016

Notes: Screws are sticking up from curb which is causing the fan to be elevated about 1/2" resulting in leakage. Recommend grinding these screws down flush to the roof curb in order to get a tight seal. Used foil tape to temporarily seal this gap but needs to be permanently fixed.



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF16

AREA: SEAFOOD STEAMER

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	DU33HFA	DU33HFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	UPBLAST	UPBLAST

Motor Data		
	Design	Actual
Motor MFG	-	NIDEC
Frame	-	48Y
Horsepower	0.33	0.33
Motor Rpm	1600	1600
Phase	1	1
Voltage (rated)	120	120/240
Amperage (rated)	-	4.4/2.6
Service Factor	-	1.0

Test Data		
	Design	Actual
CFM	600	656
Fan RPM	DIRECT DRIVE	DIRECT DRIVE
Fan Rotation	-	CCW
Motor RPM	-	DIRECT DRIVE
System SetPt	-	54%
RL Voltage	-	123
RL Amperage	-	0.8
Total ESP	0.25"	0.27"
Fan Inlet SP	-	-0.27"
Fan Discharge SP	-	ATM

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: FAN - Exhaust



Asset: EF17

AREA: SEAFOOD GRILLER

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	NCA18HPFA	NCA18HPFA
Serial Num	-	2082666
Type	CENTRIFUGAL	CENTRIFUGAL
Configuration	UPBLAST	UPBLAST

Test Data		
	Design	Actual
CFM	2000	1983
Fan RPM	-	886
Fan Rotation	-	CCW
Motor RPM	-	1743
RL Voltage	-	210/211/211
RL Amperage	-	2.4/2.3/2.3
Total ESP	1.00"	0.65"
Fan Inlet SP	-	-0.65"
Fan Discharge SP	-	ATM

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	56
Horsepower	0.75	0.75
Motor Rpm	1755	1755
Phase	3	3
Voltage (rated)	208	208-230/460
Amperage (rated)	-	2.96-2.68/1.34
Service Factor	-	1.25

Drive Data		
	Design	Actual
Motor Sheave Size	-	VL40
Motor Bore Size	-	0.625"
Motor Sheave SetPt	-	3.3"
Fan Sheave Size	-	6.75"
Fan Sheave Bore	-	1"
Belt CL Distance	-	7"
Num of Belts	-	1
Belt Size	-	AX27

Completed By: Kyle Olson on 03/16/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	6024 ND-2	6024 ND-2
Job / Serial Num	-	2082666
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	72	72"
Hood Width	60	60"

Performance Data		
	Design	Actual
Smoke Generation Type	-	45 SEC SMOKE CANDLE
Hood Capture %	-	100%

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	BAFFLE
Filter Size 1	16" X 16"	16" X 16"
Filter Size 2	-	-
Filter Qty 1	4	4
Filter Qty 2	-	-
Filter AK factor size 1	1.68	1.62
Filters AK factor size 2	-	-
Filter Total AK Area	6.72	6.48
Filter1 FPM	-	201
Filter2 FPM	-	231
Filter3 FPM	-	224
Filter4 FPM	-	210
Filter5 FPM	-	-
Filter6 FPM	-	-
Filter7 FPM	-	-
Filter8 FPM	-	-
Filter9 FPM	-	-
Filter10 FPM	-	-
Filter11 FPM	-	-
Filter12 FPM	-	-
Filter High FPM(corr)	-	231
Filter Low FPM (corr)	-	201
Filter Ave FPM(corr)	-	217
CFM	1350	1406

Completed By: Kyle Olson on 03/15/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: Kitchen Hood Type I



Asset: HD2

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	6024 ND-2 (2)	6024 ND-2
Job / Serial Num	-	2082666
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	96"	96"
Hood Width	60"	60"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	BAFFLE
Filter Size 1	16X16	16" X 16"
Filter Qty 1	5	5
Filter AK factor size 1	1.68	1.62
Filter Total AK Area	8.4	8.1
Filter1 FPM	-	175
Filter2 FPM	-	217
Filter3 FPM	-	216
Filter4 FPM	-	216
Filter5 FPM	-	220
Filter6 FPM	-	-
Filter High FPM(corr)	-	220
Filter Low FPM (corr)	-	175
Filter Ave FPM(corr)	-	209
CFM	1800	1693

Cooking Equipment		
	Design	Actual
Item 1	-	OVEN
Item 2	-	STOVE TOP
Item 3	-	-

Completed By: Kyle Olson on 03/15/2016

Notes: 94%

Performance Data		
	Design	Actual
Smoke Generation Type	-	45 SEC SMOKE CANDLE
Cooking Equip Heat On	-	YES
Hood Capture %	-	100%
Space Offset Temp Riser 1	-	15
Space Offset Temp Riser 2	-	15
Riser Temp F (idle) Riser 1	-	15
Riser Temp F (idle) Riser 2	-	15
Ambient Room Temp	-	73
100% override functional	-	YES

General		
	Design	Actual
Third Party Witness	-	DELI MANAGER
Third Party Company	-	KROGER
Tech Witness	-	KYLE OLSON
Tech Company	-	NATIONAL TAB



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: Kitchen Hood Type I



Asset: HD3

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	6024 ND-2 (2)	6024 ND-2
Job / Serial Num	-	2082666
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	108"	108"
Hood Width	60"	60"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	BAFFLE
Filter Size 1	16" X 16"	16" X 16"
Filter Qty 1	6	6
Filter AK factor size 1	1.68	1.62
Filter Total AK Area	10.08	9.72
Filter1 FPM	-	144
Filter2 FPM	-	179
Filter3 FPM	-	188
Filter4 FPM	-	196
Filter5 FPM	-	169
Filter6 FPM	-	150
Filter High FPM(corr)	-	196
Filter Low FPM (corr)	-	144
Filter Ave FPM(corr)	-	171
CFM	1575	1662

Cooking Equipment		
	Design	Actual
Item 1	-	OVEN
Item 2	-	OVEN
Item 3	-	-

Completed By: Kyle Olson on 03/16/2016

Notes:

Performance Data		
	Design	Actual
Smoke Generation Type	-	45 SEC SMOKE CANDLE
Cooking Equip Heat On	-	YES
Hood Capture %	-	100%
Space Offset Temp Riser 1	-	15
Space Offset Temp Riser 2	-	15
Riser Temp F (idle) Riser 1	-	15
Riser Temp F (idle) Riser 2	-	15
Ambient Room Temp	-	73
100% override functional	-	YES

General		
	Design	Actual
Third Party Witness	-	DELI MANAGER
Third Party Company	-	KROGER
Tech Witness	-	KYLE OLSON
Tech Company	-	NATIONAL TAB



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: Kitchen Hood Type I



Asset: HD4

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	6024 ND-2 (2)	6024 ND-2
Job / Serial Num	-	2082666
Type	TYPE I CANOPY	TYPE I CANOPY
Hood length	108	108"
Hood Width	60	60"

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	BAFFLE
Filter Size 1	16" X 16"	16" X 16"
Filter Qty 1	6	6
Filter AK factor size 1	1.68	1.62
Filter Total AK Area	10.08	9.72
Filter1 FPM	-	162
Filter2 FPM	-	179
Filter3 FPM	-	197
Filter4 FPM	-	186
Filter5 FPM	-	168
Filter6 FPM	-	156
Filter High FPM(corr)	-	197
Filter Low FPM (corr)	-	156
Filter Ave FPM(corr)	-	175
CFM	1575	1701

Cooking Equipment		
	Design	Actual
Item 1	-	FRYER
Item 2	-	FRYER
Item 3	-	FRYER

Completed By: Kyle Olson on 03/16/2016

Notes:

Performance Data		
	Design	Actual
Smoke Generation Type	-	45 SEC SMOKE CANDLE
Cooking Equip Heat On	-	YES
Hood Capture %	-	100%
Space Offset Temp Riser 1	-	15
Space Offset Temp Riser 2	-	15
Riser Temp F (idle) Riser 1	-	15
Riser Temp F (idle) Riser 2	-	15
Ambient Room Temp	-	73
100% override functional	-	YES

General		
	Design	Actual
Third Party Witness	-	DELI MANAGER
Third Party Company	-	KROGER
Tech Witness	-	KYLE OLSON
Tech Company	-	KROGER



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)

System/Unit: Kitchen Hood Type I



Asset: HD5

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	6030 NDI	6030 NDI
Job / Serial Num	-	2082666
Type	TYPE I ISLAND HOOD	TYPE I ISLAND HOOD
Hood length	48"	48"
Hood Width	60"	60"

Performance Data		
	Design	Actual
Smoke Generation Type	-	45 SEC SMOKE CANDLE
Hood Capture %	-	100%

Test Data Exhaust		
	Design	Actual
Filter Type	CAPTRATE SOLO	BAFFLE
Filter Size 1	16" X 16"	16" X 16"
Filter Size 2	-	-
Filter Qty 1	4	4
Filter Qty 2	-	-
Filter AK factor size 1	1.68	1.62
Filters AK factor size 2	-	-
Filter Total AK Area	6.72	6.48
Filter1 FPM	-	300
Filter2 FPM	-	301
Filter3 FPM	-	302
Filter4 FPM	-	319
Filter5 FPM	-	-
Filter6 FPM	-	-
Filter7 FPM	-	-
Filter8 FPM	-	-
Filter9 FPM	-	-
Filter10 FPM	-	-
Filter11 FPM	-	-
Filter12 FPM	-	-
Filter High FPM(corr)	-	319
Filter Low FPM (corr)	-	300
Filter Ave FPM(corr)	-	306
CFM	2000	1983

Completed By: Kyle Olson on 03/15/2016

Notes:



National TAB

Project: KROGER 034-591 BURLERSON, TX (NEW STORE)

System/Unit: Kitchen Hood Type II



Asset: HD(Type2)1

AREA:

Unit Data		
	Design	Actual
MFG	CAPTIVE-AIRE	CAPTIVE-AIRE
Model Num	6024 VHB-G	6024 VHB-G
Serial Num	-	2082666
Type	TYPE II CANOPY	TYPE II CANOPY
Hood length	48"	48"
Hood Width	60"	60"

Test Data		
	Design	Actual
Exhaust CFM	600	656

Completed By: Kyle Olson on 03/15/2016

Notes:



National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)



Round Duct Traverse Report

System: EF7 (CAPTIVE-AIRE-NCA14HPFA-BAKERY OVEN)

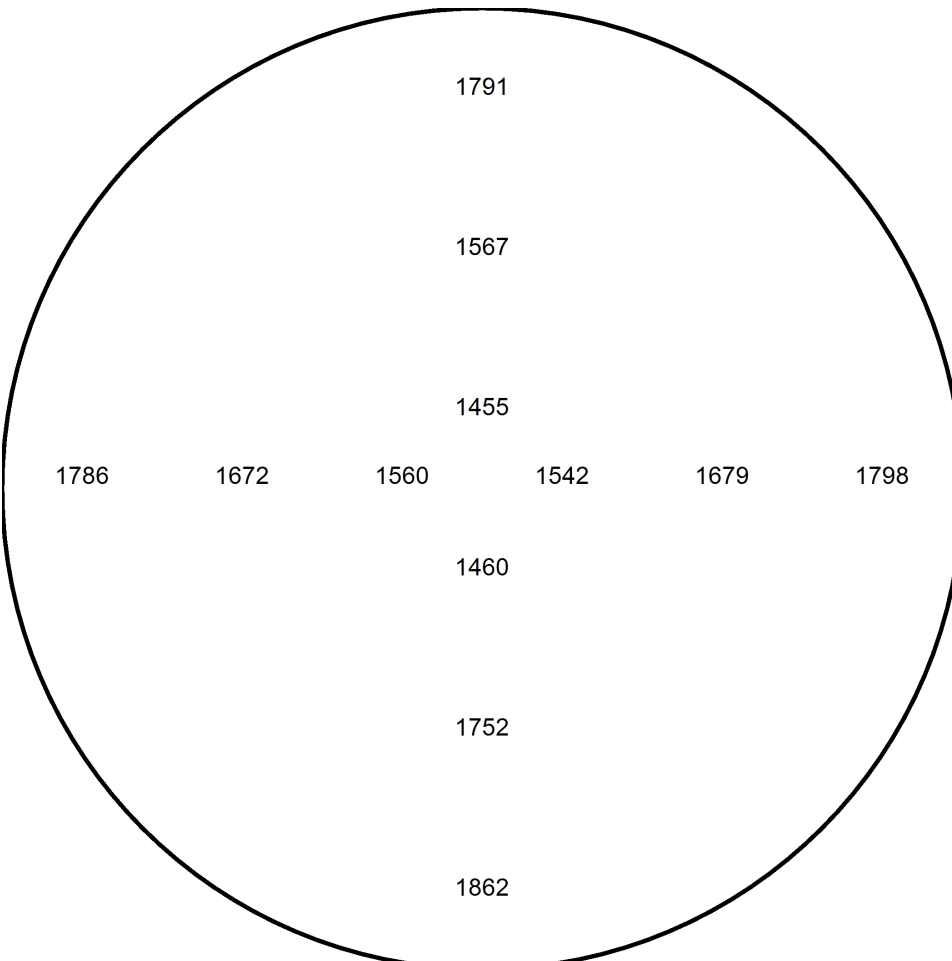
Service:

Altitude: Density: Factor:

Duct		Design	Actual
Diameter: 10	Readings: 6	SCFM:	SCFM:
Area: 0.55		FPM:	FPM: 1660
S.P.:	Temp:	CFM:	CFM: 905

Notes:

Duct Traverse Data Points





National TAB

Project: KROGER 034-591 BURLESON, TX (NEW STORE)



Round Duct Traverse Report

System: EF8 (CAPTIVE-AIRE-NCA14HPFA-BAKERY OVEN)

Service:

Altitude: Density: Factor:

Duct		Design	Actual
Diameter: 10	Readings: 6	SCFM:	SCFM:
Area: 0.55		FPM:	FPM: 1697
S.P.:	Temp:	CFM:	CFM: 926

Notes:

Duct Traverse Data Points

