Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 07/03/2025

Completed By: National TAB

PROJECT

06-30-25 CHIPOTLE #4957 MANOR, TX

13000 N FM 973

MANOR, TX 78653

Client

Chipotle Mexican Grill

610 Newport Center Drive, Suite 1100

Newport Beach, CA 92660

National TAB

Project: 06-30-25 CHIPOTLE #4957 MANOR, TX

Table Of Contents

Project Summary
The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report are further details about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

FCU's w/ Diffusers
Each of the FCU's were measured at their terminal devices utilizing a flow hood. The sum of these readings is equal to the total flow for that particular unit. The total flow of each FCU was then adjusted to within tolerance of the specified design. Each terminal diffuser was balanced to within tolerance of the engineer's design volume utilizing the provided hand damper located at the takeoff of the main & branch trunk line(s). Any equipment that fell outside of this tolerance is noted throughout the report.

Kitchen Exhaust Hood & Associated Fans
Each kitchen exhaust fan was measured at the hood filter bay utilizing a velocity matrix and a manufacturer's correction factor. Each filter velocity is multiplied by the manufacturer's corrected area. The sum of these readings equals the total flow of the exhaust fans. The total flow of the exhaust was then adjusted to within tolerance of the design flow. Any EF's that fell outside of this tolerance is noted throughout the report.

MUA (Make Up Air Unit) w/ PSP
Total flow for the MAU (Make-up Air Unit) unit was measured by readings taken at the discharge of the hood's perforated supply plenum. Readings taken with a velocity matrix were averaged and multiplied by a manufacturer's corrected area. Adjustments to the fan speed were made in order to bring the unit to within design tolerance. Any MUA's that fell outside of this tolerance is noted throughout the report.

Ceiling Exhaust Fans
The ceiling exhaust fans were measured using a flow hood. If speed adjustment was provided, the fan speed was adjusted to within design tolerance. Any equipment that fell outside of this tolerance is noted throughout the report.

Final Building Tests
After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances of -0.02" wc to +0.02" wc and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.
The hood capture was tested at the perimeter of the hood and the cook top level with the equipment heat on to ensure satisfactory hood capture and containment.

Issue List

- Diffuser 2-8
- EF Hinge kit
- Gravity Dampers
- KITCHEN DUCT
- RESTROOM EXHAUST FAN
- RTU 2 Diffusers
- York Economizer

06-30-25 CHIPOTLE #4957 MANOR, TX

Project Issue Information

Issue Name : Diffuser 2-8
Description : Unable to access damper, unable to adjust airflow

Created By :	National TAB	**Assigned To :**	National TAB - Cavin Van
Status :	Open		
Priority :	Medium	**Asset Tag :**	
Originated Date :	07/02/2025 - Cavin Van - National TAB		

06-30-25 CHIPOTLE #4957 MANOR, TX

Project Issue Information

Issue Name : EF Hinge kit
Description : EF hinge kit not installed

Created By : National TAB
Assigned To : National TAB - Will Turnbough

Status : Closed
Priority : Low
Asset Tag :
Originated Date : 06/30/2025 - Cavin Van - National TAB

Project Issue File Details

06/30/2025

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Project Issue Information

Issue Name : Gravity Dampers

Description : Gravity dampers on both RTU's are open when the units are running, causing the doors to spring open and building pressure to be 0.30. Currently cardboard is placed in front of them, recommend shutting the dampers.

Created By : National TAB

Assigned To : National TAB - Brianna Biggs

Status : Open

Priority : Urgent

Asset Tag :

Originated Date : 07/02/2025 - Cavin Van - National TAB

Project Issue File Details

07/02/2025

07/02/2025

07/02/2025

06-30-25 CHIPOTLE #4957 MANOR, TX

Project Issue Information

Issue Name :	KITCHEN DUCT		
Description :	Air flow is being restricted, and static pressure is high due to the ductwork being long and tangled. Discharge: 1.22625 Mixed air: -0.4091 Fan suction: -1.0791		
Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Open		
Priority :	Medium	**Asset Tag :**	
Originated Date :	07/01/2025 - Cavin Van - National TAB		

06-30-25 CHIPOTLE #4957 MANOR, TX

Project Issue Information

Issue Name :	RESTROOM EXHAUST FAN		
Description :	Speed controller is set as low as possible and unable to control airflow due to no face damper (Integral OBD)		
Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Open		
Priority :	Medium	**Asset Tag :**	
Originated Date :	07/02/2025 - Cavin Van - National TAB		

06-30-25 CHIPOTLE #4957 MANOR, TX

Project Issue Information

Issue Name :	RTU 2 Diffusers		
Description :	Diffusers appear to have a possible restriction in the ductwork and unable to increase speed due to it being 12.35/11.6/11.99 amps and FLA rating is 13.5 - 3. The static pressures are, Fan suction: -1.3067"; Mixed Air: -0.8718"; and Discharge: 1.0980".		
Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Open		
Priority :	Medium	**Asset Tag :**	
Originated Date :	07/01/2025 - Cavin Van - National TAB		

06-30-25 CHIPOTLE #4957 MANOR, TX

Project Issue Information

Issue Name :	York Economizer		
Description :	York Economizer not working when setting Econ-min pos, had to manually open them.		
Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Pending		
Priority :	Low	**Asset Tag :**	
Originated Date :	06/30/2025 - Cavin Van - National TAB		

National TAB

Project: 06-30-25 CHIPOTLE #4957 MANOR, TX

- Open BALANCE_SCHEDULE_4957.xlsx

CheckList List

- 01: RTU'S/AHU'S
- 02: EF'S
- 03: MUA
- 04: HOODS
- 05: FINAL TESTS

06-30-25 CHIPOTLE #4957 MANOR, TX

CheckList Information

Name :	01: RTU'S/AHU'S	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	05/21/2025 - Tara Metcalf - National TAB		

CheckList Item Details

RTU's/AHU's

Thermostats installed and have power?	Pass
Comment: Thermostats are installed and have power.	
All diffusers and grilles are installed and match design?	Pass
Comment:	
Economizers are assembled and functional?	Fail
Comment: Not functional	
Free cooling enthalpy set point set for lowest setting (Typically "D")	Pass
Comment:	
Motors are all operating below the FLA rating?	Pass
Comment:	
Are belts tight?	Pass
Comment:	
If direct drive unit is the speed controller working?	N/A

Comment:	
Is gas piping installed and valves turned on?	Pass
Comment:	
Unit free of noticeable noise and vibration	Pass
Comment:	
Deflectors on spiral duct grilles so that the dining area is free of drafting?	Pass
Comment:	
Final outside air damper position is marked with permanent marker?	Pass
Comment:	

06-30-25 CHIPOTLE #4957 MANOR, TX

CheckList Information

Name : 02: EF'S **Status :** Not Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 05/21/2025 - Tara Metcalf - National TAB

CheckList Item Details

EF's

Rotation is correct?	Yes
Comment:	
Belts are tight?	Yes
Comment: Direct Drive	
Viroguard installed on hood fan(s)?	Yes
Comment:	
Hinge kit installed installed on hood fan?	Yes
Comment:	
Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?	Yes
Comment:	
Flex conduit is long enough so that fan can be completely tilted back?	Yes
Comment:	
There is no major leakage around base of fan?	Yes

Comment:	
Is the motor operating below the motor FLA rating?	Yes
Comment:	
For restroom fan(s) is the back draft damper installed and can it fully open?	Yes
Comment:	
Unit free of noticeable noise and vibration?	Yes
Comment:	

06-30-25 CHIPOTLE #4957 MANOR, TX

CheckList Information

Name :	03: MUA	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	05/21/2025 - Tara Metcalf - National TAB		

CheckList Item Details

MUA

Rotation is correct?	Yes
Comment:	
Gas piping is installed and valves are in on position?	Yes
Comment:	
Internal motorized damper is fully opening?	Yes
Comment:	
Motor is operating below the FLA rating?	Yes
Comment:	
Unit free of noticeable noise and vibration?	Yes
Comment:	

06-30-25 CHIPOTLE #4957 MANOR, TX

CheckList Information

Name :	04: HOODS	**Status :**	Not Completed
Assigned Organization :	National TAB	**Asset :**	
Requesting Organization :	National TAB		
Created Date :	05/21/2025 - Tara Metcalf - National TAB		

CheckList Item Details

HOODS

All hood filters installed and accounted for?	Yes
Comment:	
Hoods are wired and have power?	Yes
Comment:	
Hood is free of alarms?	No
Comment: CORE #01 FAULT PRESSURE SWITCH FAULT	
Hood is free of damage?	Yes
Comment:	
Quarter or full vertical end panels are installed if specified?	Yes
Comment:	

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CheckList Information

Name : 05: FINAL TESTS **Status :** Not Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 05/21/2025 - Tara Metcalf - National TAB

CheckList Item Details

FINAL CHECKS

Is space free of drafting?	Yes
Comment:	
Is space comfortable in all areas?	Yes
Comment:	
Is the space free of ventilation noise?	Yes
Comment:	
List kitchen equipment turned on for testing	N/A
Comment:	
List smoke candle type used	
Comment:	

HOOD CAPTURE TEST

Smoke test capture % - Perimeter of hood	
Comment:	
100%	

Smoke test capture % - Top of cooking surface	
Comment: 100%	
WITNESS	
Date test was completed	07/02/2025
Comment:	
TAB tech name / Firm	
Comment: CAVIN VAN/ NTAB	
Site super name / Firm	
Comment:	
Owner representative name / Firm (if Applicable)	
Comment:	
BUILDING PRESSURE	
Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)	Pass
Comment:	

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Project: 06-30-25 CHIPOTLE #4957 MANOR, TX

System/Unit: AHU/RTU

Asset: RTU1 AREA:KITCHEN

Unit Data		
	Design	**Actual**
MFG	YORK	YORK
Serial Num	-	N2C55537533
Model Num	KJ150	KJ150N18R2BEEAA2A1
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR RELIANCE
Frame	-	184T
Horsepower	-	5
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	208
Rated Amperage	-	13.5

Drive Data	
	Actual
Motor Sheave Size	5.5"
Motor Bore Size	1"
Motor Sheave SetPt	
Fan Sheave Size	8"
Fan Sheave Bore	1"
Belt CL Distance	19.5"
Num of Belts	1
Belt Size	BX56
Belt Alignment	CORRECT

Test Data		
	Design	**Actual**
SF CFM	4400	4080
SF RPM	-	1186
RA CFM	3900	3548
OA CFM	500	532
RL Voltage	-	210
RL Amperage	-	11.20/11.32/11.78
SF Rotation	-	CW
SF System SetPt	-	100
RA Damper Position	-	N/A
Min OA Damper Position	-	N/A
Min OA Damper Type	-	N/A
OA Enthalpy Setpt	-	

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.5309
Fan Suction SP	-	-1.1039
Fan Discharge SP	-	1.1722
Total ESP	.80"	
Fan Total SP	-	

General	
	Actual
Fan Rotation Correct	CORRECT
Unit Filters Clean	CLEAN
Condensate Drain Installed	

Unit Data - PHOTO LOG

07/02/2025

National TAB

Project:06-30-25 CHIPOTLE #4957 MANOR, TX

AHU/RTU

Diffuser Supply (GRD)

RTU1/KITCHEN

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	KITCHEN	CD1	14"	675	1	224	510	619	91.7
SGRD2	KITCHEN	CD1	14"	675	1	191	419	625	92.6
SGRD3	KITCHEN	ACPSP	165X6	696	5.3625	445	804	627	90.1
SGRD4	KITCHEN	CD3	8"	250	1	21	193	235	94.0
SGRD5	KITCHEN	CD3	8"	250	1	23	156	225	90.0
SGRD6	KITCHEN	CD3	8"	250	1	51	193	235	94.0
SGRD7	KITCHEN	CD3	8"	250	1	13	182	225	90.0
SGRD8	KITCHEN	CD3	8"	150	1	98	205	154	102.7
SGRD9	KITCHEN	CD3	8"	600	1	203	501	560	93.3
SGRD10	KITCHEN	CD3	8"	600	1	226	510	575	95.8
Total				4396		1495	3673	4080	92.81%

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Project: 06-30-25 CHIPOTLE #4957 MANOR, TX

System/Unit: AHU/RTU

Asset: RTU2 AREA:DINING

Unit Data		
	Design	**Actual**
MFG	YORK	YORK
Serial Num	-	
Model Num	KJ150	KJ150N24R2BEEAA2A1
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	4
OA Filter Size 1	-	
Num Final Filter 1	-	
Final Filter Size 1	-	
Num Final Filter 2	-	
Final Filter Size 2	-	

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR RELIANCE
Frame	-	184T
Horsepower	-	5
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	208	
Rated Amperage	-	

Drive Data	
	Actual
Motor Sheave Size	5.5"
Motor Bore Size	1"
Motor Sheave SetPt	
Fan Sheave Size	8"
Fan Sheave Bore	1"
Belt CL Distance	19.5"
Num of Belts	1
Belt Size	BX56
Belt Alignment	CORRECT

Test Data		
	Design	**Actual**
SF CFM	4400	3887
SF RPM	-	1181
RA CFM	3400	2954
OA CFM	1000	933
RL Voltage	-	210
RL Amperage	-	11.6/11.99/12.35
SF Rotation	-	CW
SF System SetPt	-	
RA Damper Position	-	
Min OA Damper Position	-	
Min OA Damper Type	-	
OA Enthalpy Setpt	-	

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.9003
Fan Suction SP	-	-1.3505
Fan Discharge SP	-	1.0278
Total ESP	.80"	
Fan Total SP	-	

General	
	Actual
Fan Rotation Correct	CORRECT
Unit Filters Clean	CLEAN
Condensate Drain Installed	

Unit Data - PHOTO LOG

07/02/2025

National TAB

Project:06-30-25 CHIPOTLE #4957 MANOR, TX

AHU/RTU

Diffuser Supply (GRD)

RTU2/DINING

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
SGRD1	DINING	SR2	8"	500		381	378	382	76.4
SGRD2	DINING	SR2	8"	600		281	346	400	66.7
SGRD3	DINING	SR1	14"	650		832	670	585	90.0
SGRD4	DINING	SR1	14"	600		343	539	579	96.5
SGRD5	DINING	SR1	14"	600		469	416	531	88.5
SGRD6	DINING	SR1	14"	600		679	684	540	90.0
SGRD7	DINING	SR1	14"	600		609	584	562	93.7
SGRD8	DINING	CD2	10"	250		379	382	308	123.2
Total				4400		3973	3999	3887	88.34%

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Project: 06-30-25 CHIPOTLE #4957 MANOR, TX

System/Unit: FAN - Exhaust

Asset: EF1 AREA:HOOD FAN

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	DU180HFA	DU180HFA
Serial Num	-	7178045
Type	UPBLAST/CEILING	UPBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	WEG W22 NEMA
Frame	-	182/4T
Horsepower	2	2.0
Motor Rpm	1232	1170
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	6.44
Service Factor	-	1.25

Test Data		
	Design	**Actual**
CFM	2550	2580
Fan RPM	-	955
Fan Rotation	-	CW
Motor RPM	-	955
System SetPt	-	49.0 HZ
RL Voltage	-	93
RL Amperage	-	4.6
Total ESP	1.450"	0.0325"
Fan Inlet SP	-	0.0325"
Fan Discharge SP	-	ATM

Unit Data - PHOTO LOG

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Project: 06-30-25 CHIPOTLE #4957 MANOR, TX

System/Unit: FAN - Exhaust

Asset: EF2 AREA:RESTROOMS

Unit Data		
	Design	**Actual**
MFG	CATIVEAIRE	CATIVEAIRE
Model Num	DR12HFA	DR12HFA
Serial Num	-	7178045
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TELCO GREEN
Frame	-	
Horsepower	.250	.250
Motor Rpm	1	1
Phase	115	1
Voltage (rated)	-	115
Amperage (rated)	-	2.8
Service Factor	-	

Test Data		
	Design	**Actual**
CFM	150	197
Fan RPM	-	303
Fan Rotation	-	CW
Motor RPM	-	303
System SetPt	-	20
RL Voltage	-	18.5
RL Amperage	-	0.11/0.12
Total ESP	.60"	0.0030"
Fan Inlet SP	-	0.0030"
Fan Discharge SP	-	ATM

Unit Data - PHOTO LOG

07/02/2025

National TAB

Project:06-30-25 CHIPOTLE #4957 MANOR, TX

FAN - Exhaust

Diffuser Ret/Exh (GRD)

EF2/RESTROOMS

Asset									
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	RESTROOM	ER1	6"	75	1	211	92	92	122.7
EGRD2	RESTROOM	ER1	6"	75	1	266	99	99	132.0
Total				150		477	191	191	127.33%

National TAB

Project: 06-30-25 CHIPOTLE #4957 MANOR, TX

System/Unit: FAN - Supply

Asset: MUA1 AREA:HOOD MUA

Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	A1-D.250-15D	A1-D.250-15D
Serial Num	-	7178045
Type	MUA	MUA
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	143T
Horsepower	1	1
Motor Rpm	1557	1740
Phase	3	3
Voltage (rated)	208	230
Amperage (rated)	-	2.90
Service Factor	-	1.15

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	y
Flame Status (pass/fail)	-	pass
Inlet Air Temp SetPt	-	
Discharge Air Temp SetPt	-	
Air Flow Switch SP Actual	-	0.37

Test Data		
	Design	**Actual**
CFM	1300	1319
SF RPM	-	1484
Motor RPM	-	1484
SF System SetPt	-	51.2 HZ
RL Voltage	-	138
RL Amperage	-	2.3
Total ESP	-	0.434
Fan Discharge SP	-	

General	
	Actual
Fan Rotation Correct	CORRECT

Notes:
DIRECT DRIVE: 50.2 hz
Didn't have access to get fan discharge.

Written By: Cavin Van on 07/02/2025

Unit Data - PHOTO LOG

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Project: 06-30-25 CHIPOTLE #4957 MANOR, TX

System/Unit: Kitchen Hood Type I

Asset: HD1 AREA:KITCHEN HOOD

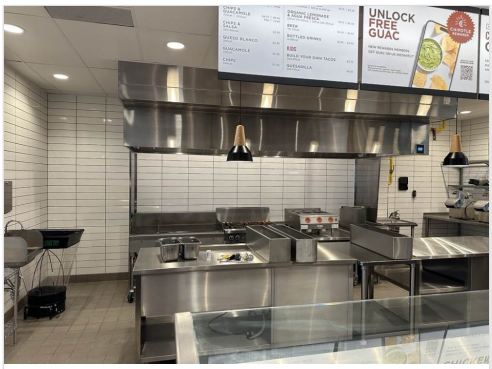
Unit Data		
	Design	**Actual**
MFG	CAPTIVEAIRE	CAPTIVEAIRE
Model Num	5424 ND-2-ACPSP-F	5424 ND-2-ACPSP-F
Job / Serial Num	-	7178045
Type	TYPE I - CANOPY	TYPE 1 - canopy
Hood length	153"	153"
Hood Width	54"	54"
Supply Plenum Type	-	
Supply Plenum Width	-	
Supply Plenum Length	-	

Test Data Exhaust		
	Design	**Actual**
Filter Type	CAPTRATE SOLO FILTER	CAPTRATE SOLO FILTER
Filter Size 1	16X16	16X16
Filter Qty 1	9	9
Filter AK factor size 1	1.62	1.62
Filter Total AK Area	14.58	14.58
Filter1 FPM	-	151
Filter2 FPM	-	175
Filter3 FPM	-	182
Filter4 FPM	-	188
Filter5 FPM	-	193
Filter6 FPM	-	197
Filter7 FPM	-	187
Filter8 FPM	-	171
Filter9 FPM	-	157
Filter Ave FPM(corr)	-	177
CFM	2550	2580

Cooking Equipment	
	Actual
Item 1	GRILL
Item 2	BURNER
Item 3	WARMER
Item 4	FRYER
Item 5	

Test Data Supply		
	Design	**Actual**
Total Area	10.31	10.31
Kv factor (Vel)	.81	0.81
Num of Readings	-	9
Reading1 FPM	-	201
Reading2 FPM	-	171
Reading3 FPM	-	145
Reading4 FPM	-	145
Reading5 FPM	-	127
Reading6 FPM	-	175
Reading7 FPM	-	163
Reading8 FPM	-	136
Reading9 FPM	-	164
Ave FPM(corr)	-	158
CFM	1300	1319

Unit Data - PHOTO LOG



07/02/2025

' LINES PER
ALL THE REFRIGERANT LINE
F FOR REFRIGERANT LINE

AL DRAWINGS. INSTALL
LASS, FILTER DRIER,
' LINES PER
MPLY WITH ASHRAE/ANSI
ENSER. IF REFRIGERANT
THE ARCHITECTURAL

RCHITECTURAL AND

AWINGS. INSTALL GREASE

A UNIT BACK TO EACH

OR POWER CONNECTION
OOR(S) THROUGH WHICH

10' CLEARANCE BETWEEN
MORE INFORMATION ON

. CONTAINED WITHIN 10"
TURAL ENGINEER FOR