

SDV Job #: 5413300 - KI-COCONUT GROVE (MASON)

Service Region: 361 - Cincinnati OH Service
Service Person: Dave King

Customer Number: 866644 **Customer Name:** NATIONAL TAB

Address: Kings Island Park
 6300 Kings Island Dr
 Coconut Grove Facility
 Kings Mills, OH 45034

Region Job #: 5227904
Region Job Name: KI-COCONUT GROVE (MASON)

Sales Region: 120 - Air Solutions
Sales Person: Joe Hertenstein

Created By: Dave King **Creation Date:** 3/17/2023 10:21 AM
Last Modified By: Dave King **Last Modified Date:** 3/27/2023 10:11 AM

Dining Room Pressure: 0 **Kitchen Pressure:** 0
Hours On Job: 0 **Extra Hours:** 0

Completed: Yes **Completed By:** Dave King
Completion Date: 3/27/2023 10:11 AM

UDS

NONE

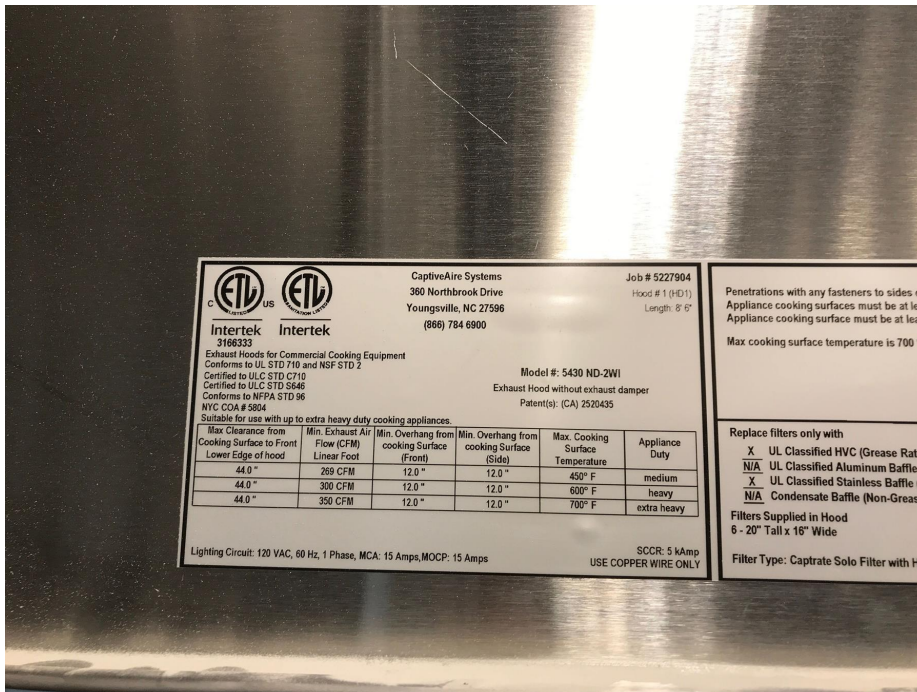
Hood Group 1

Exhaust CFM: Design = 2550 Initial = 2220 Final = 2220 (87.1% of design)

Supply CFM: Design = 4450 Initial = 2814 Final = 2814 (63.2% of design)

Other Notes:

N/A





Hood 1 (HD1) (HD1)

Model: 5430ND-2WI-PSP-SS **Length:** 8' 6.00"
Exhaust CFM: Design = 2550 Initial = 2220 Final = 2220 (87.1% of design)
Other Notes:

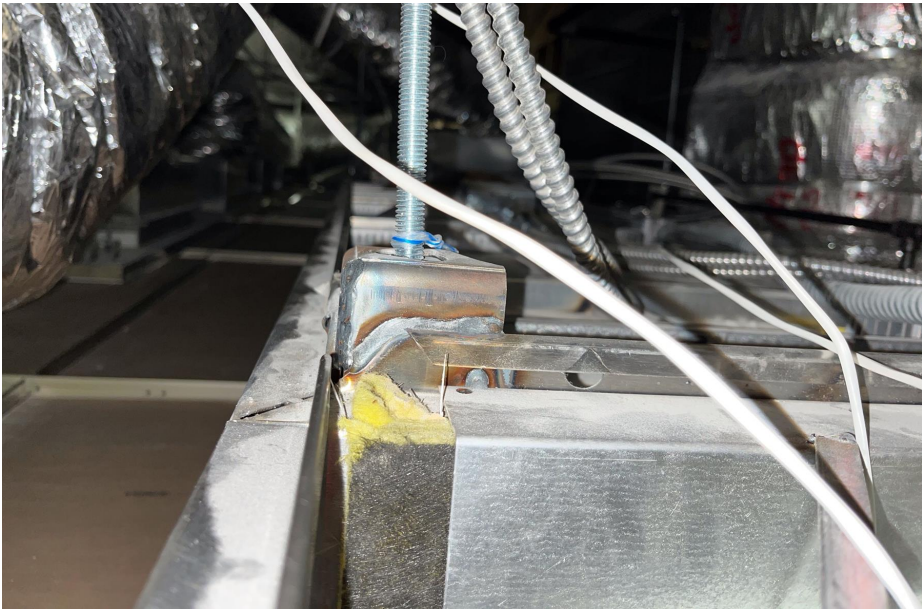
Talked with sales office about low air flow. Told CAS Service too leave as is.
 See attachment(s): [20230317132247.mp4]

Installation

Hung Using appropriate material to safely secure hood. Design: **Yes** Actual: **No**

Other Notes:
double nut not properly used. PSP missing rear hanging rods





COOKING EQUIPMENT ON AND OPERATING	Design: Yes	Actual: No
COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE	Design: Yes	Actual: No
Was a smoke test performed on Hood System?	Design: Yes	Actual: Yes

Filters

Type: Captrate Solo

Filter 1 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 180 fpm	Final Velocity: 180 fpm	Initial CFM: 374	Final CFM: 374
Filter 2 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 182 fpm	Final Velocity: 182 fpm	Initial CFM: 378	Final CFM: 378
Filter 3 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 186 fpm	Final Velocity: 186 fpm	Initial CFM: 386	Final CFM: 386
Filter 4 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 181 fpm	Final Velocity: 181 fpm	Initial CFM: 376	Final CFM: 376
Filter 5 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 182 fpm	Final Velocity: 182 fpm	Initial CFM: 378	Final CFM: 378
Filter 6 Fan: #1 - CASRE18DD (EF1)	Size: 20x16	Initial Velocity: 158 fpm	Final Velocity: 158 fpm	Initial CFM: 328	Final CFM: 328

Supply

Supply CFM: Design = 1650 Initial = 1199 Actual = 1199 (72.7% of design)
Fan: #2 - A2-20D-MPU (SF-MPU1)

PSP 1

Orientation: Left **Length:** 4' 6.00" **Width:** 16.00" **Banks:** 1
Blanks: 1
CFM: Design = 825 Initial = 615 Final = 615 (74.5% of design)
Velocity: Design = 165 Initial = 123 Final = 123 (74.5% of design)

Readings:

1: Initial: 115 fpm, Final: 115 fpm 2: Initial: 119 fpm, Final: 119 fpm 3: Initial: 101 fpm, Final: 101 fpm
4: Initial: 133 fpm, Final: 133 fpm 5: Initial: 135 fpm, Final: 135 fpm 6: Initial: 135 fpm, Final: 135 fpm

PSP 2

Orientation: Right **Length:** 4' 6.00" **Width:** 16.00" **Banks:** 1
Blanks: 1
CFM: Design = 825 Initial = 584 Final = 584 (70.8% of design)
Velocity: Design = 165 Initial = 116 Final = 116 (70.3% of design)

Readings:

1: Initial: 104 fpm, Final: 104 fpm 2: Initial: 110 fpm, Final: 110 fpm 3: Initial: 104 fpm, Final: 104 fpm
4: Initial: 131 fpm, Final: 131 fpm 5: Initial: 125 fpm, Final: 125 fpm 6: Initial: 127 fpm, Final: 127 fpm

Hood 2 (PSP-EXHD) (PSP-EXHD)

Model: 146MISC-PSP **Length:** 17' 6.00"
Exhaust CFM: Design = 0 Initial = 0 Final = 0 (0% of design)

Installation Notes:

Talked with sales office about low air flow. Told CAS Service too leave as is.

Installation

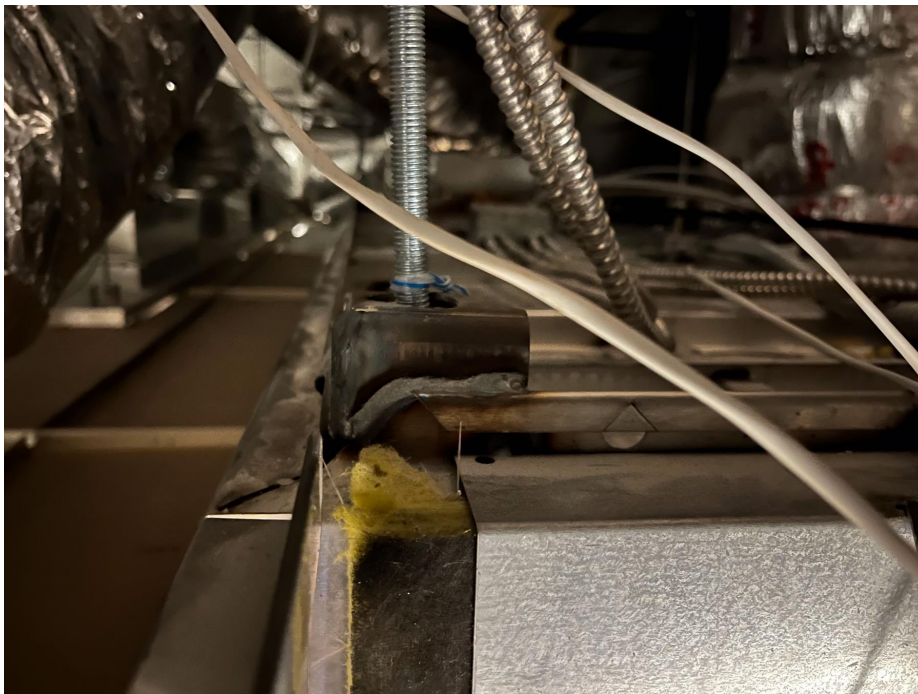
Hung Using appropriate material to safely secure hood.

Design: **Yes**

Actual: **No**

Other Notes:

N/A



COOKING EQUIPMENT ON AND OPERATING

Design: **Yes**

Actual: **No**

COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE

Design: **Yes**

Actual: **No**

Was a smoke test performed on Hood System?

N/A

Supply

Supply CFM: Design = 2800
Fan: #2 - A2-20D-MPU (SF-MPU1)

Initial = 1615

Actual = 1615

(57.7% of design)

PSP 1

Orientation: Front **Length:** 17' 6.00" **Width:** 14.00" **Banks:** 2
Blanks: 2
CFM: Design = 2800 Initial = 1615 Final = 1615 (57.7% of design)
Velocity: Design = 157 Initial = 90 Final = 90 (57.3% of design)

Readings:

1: Initial: 125 fpm, Final: 125 fpm 2: Initial: 135 fpm, Final: 135 fpm 3: Initial: 123 fpm, Final: 123 fpm
4: Initial: 109 fpm, Final: 109 fpm 5: Initial: 138 fpm, Final: 138 fpm 6: Initial: 121 fpm, Final: 121 fpm
7: Initial: 116 fpm, Final: 116 fpm 8: Initial: 100 fpm, Final: 100 fpm 9: Initial: 109 fpm, Final: 109 fpm
10: Initial: 110 fpm, Final: 110 fpm 11: Initial: 95 fpm, Final: 95 fpm 12: Initial: 98 fpm, Final: 98 fpm
13: Initial: 73 fpm, Final: 73 fpm 14: Initial: 63 fpm, Final: 63 fpm 15: Initial: 62 fpm, Final: 62 fpm
16: Initial: 48 fpm, Final: 48 fpm 17: Initial: 55 fpm, Final: 55 fpm 18: Initial: 53 fpm, Final: 53 fpm
19: Initial: 42 fpm, Final: 42 fpm 20: Initial: 53 fpm, Final: 53 fpm

Hood Group 2

Exhaust CFM: Design = 900 Initial = 708 Final = 894 (99.3% of design)

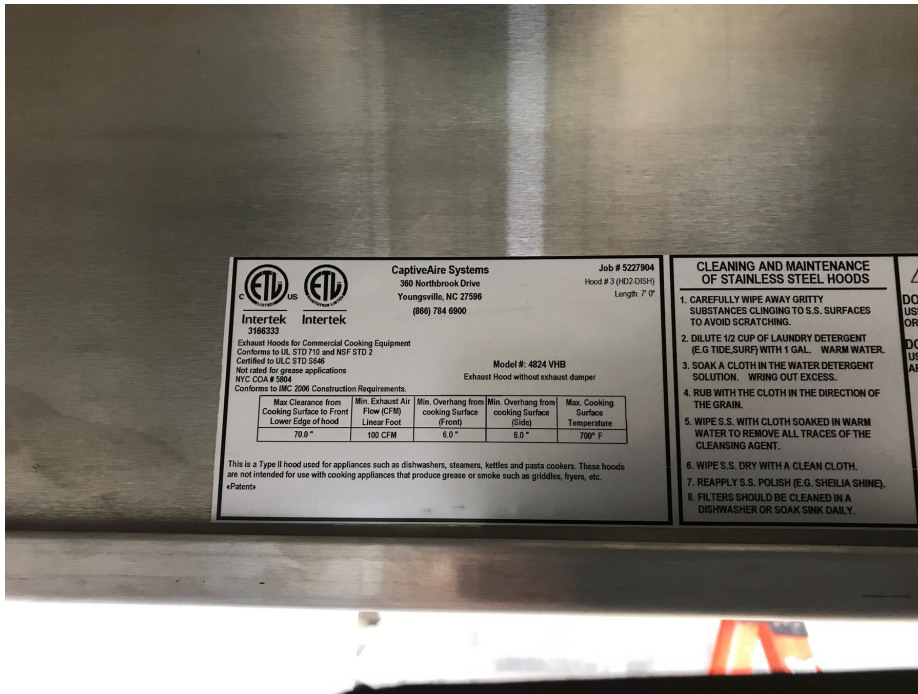
Hood 3 (HD2-DISH) (HD2-DISH)

Model: 4824VHB-G **Length:** 7' 0.00"
Exhaust CFM: Design = 900 Initial = 708 Final = 894 (99.3% of design)

Other Notes:

N/A

See attachment(s): [20230317124148.mp4]



Installation

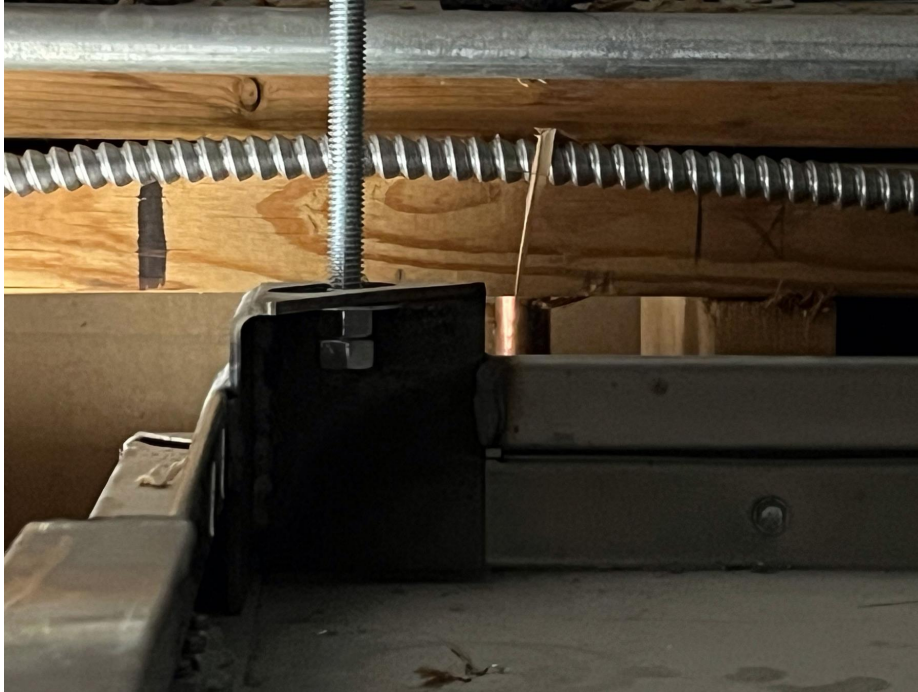
Hung Using appropriate material to safely secure hood.

Design: **Yes**

Actual: **No**

Other Notes:

Hood hung with 3/8 rod. Double nut not properly used



COOKING EQUIPMENT ON AND OPERATING

Design: **Yes**

Actual: **No**

COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE

Design: **Yes**

Actual: **No**

Was a smoke test performed on Hood System?

Design: **Yes**

Actual: **Yes**

Fans

Fan 1 - CASRE18DD (EF1) (EF1)

Model: CASRE18DD

Installation Notes:

Talked with sales office about low air flow. Told CAS Service too leave as is.



Exhaust

Exhaust CFM: Design = 2550 Actual = 2220 (87.1% of design)

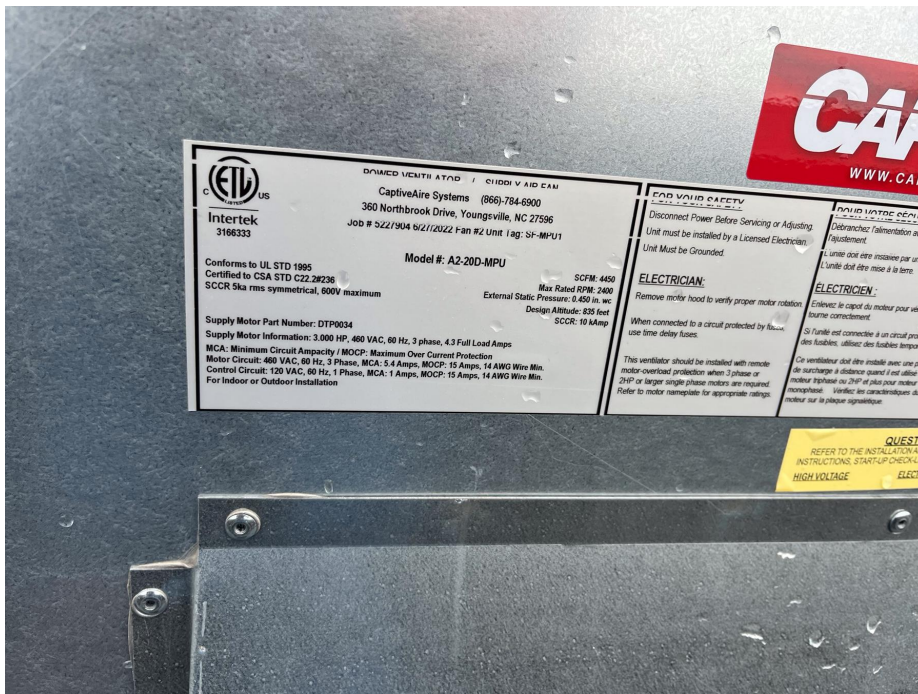
Record the VFD HZ		Actual: 45
VOLTS	Design: 460	Actual: 480
HP	Design: 2	Actual: 2
HUB SET SCREW TIGHT	Design: Yes	Actual: Yes
FAN LEVEL	Design: Yes	Actual: Yes
ROTATION	Design: Correct	Actual: Correct
FAN VIBRATION	Design: Good	Actual: Good
RPM - DESIGN	Design: 1333	Actual: 1275
RPM - MAX	Design: 1900	Actual: N/A
RPM - MAX RECOMMENDED	Design: 1700	Actual: N/A
FLA	Design: 2.6	Actual: 2.5
OVERLOAD SET POINT	N/A	
PHASE	Design: 3	Actual: 3
FAN WITHIN 5 MILES OF COAST		Actual: No
INSPECT ALL EXTERIOR SIDES OF UNIT. ANY VISIBLE DAMAGE	Design: No	Actual: No

Fan 2 - A2-20D-MPU (SF-MPU1) (SF-MPU1)

Model: A2-20D-MPU

Installation Notes:

Talked with sales office about low air flow. Said he'd have mechanical contractor look into airflow restrictions. Told CAS Service too leave as is.



Supply

Supply CFM: Design = 4450 Actual = 2814 (63.2% of design)

VOLTS	Design: 460	Actual: 480
HP	Design: 3	Actual: 3
HUB SET SCREW TIGHT	Design: Yes	Actual: Yes
FAN LEVEL	Design: Yes	Actual: Yes
ROTATION	Design: Correct	Actual: Correct
FAN VIBRATION	Design: Good	Actual: Good
RPM - DESIGN	Design: 1597	Actual: 1053
RPM - MAX	Design: 2400	Actual: N/A
RPM - MAX RECOMMENDED	Design: 2000	Actual: N/A
FLA	Design: 4.3	Actual: 4.2

OVERLOAD SET POINT N/A

PHASE	Design: 3	Actual: 3
DAMPER INSTALLED	Design: Yes	Actual: Yes

Other Notes:

Yes

FAN WITHIN 5 MILES OF COAST		Actual: No
INSPECT ALL EXTERIOR SIDES OF UNIT. ANY VISIBLE DAMAGE		Actual: No
Record the VFD HZ		Actual: 36
Is Supply Fan bolted/secured to curb? If no, secure fan properly according to manual.	Design: Yes	Actual: Yes

Cooling

TEMP DROP	Design: 14	Actual: N/A
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Other Notes:

To cold to run cooling outside

MPU

CONTROL MODE		Actual: Auto
THERMOSTAT SET POINT	Design: 85	Actual: N/A
EACH CONDENSER HAS IT'S OWN BREAKER	Design: Yes	Actual: Yes
CONDENSER-1 VOLTAGE	Design: 460	Actual: N/A
CONDENSER-2 VOLTAGE	Design: 460	Actual: N/A

Fan 3 - SIF11DD (EF2) (EF2)

Model: SIF11DD

Other Notes:

N/A



Exhaust

Exhaust CFM: Design = 900 Actual = 894 (99.3% of design)

Record the ECM Speed		Actual: 90
VOLTS	Design: 115	Actual: 119
HP	Design: 0.5	Actual: 0.5
HUB SET SCREW TIGHT	Design: Yes	Actual: Yes
FAN LEVEL	Design: Yes	Actual: Yes
ROTATION	Design: Correct	Actual: Correct
FAN VIBRATION	Design: Good	Actual: Good
RPM - DESIGN	Design: 1483	Actual: 1620
RPM - MAX	Design: 2400	Actual: N/A
RPM - MAX RECOMMENDED	Design: 2000	Actual: N/A
FLA	Design: 6.3	Actual: 4.8
PHASE	Design: 1	Actual: N/A
FAN WITHIN 5 MILES OF COAST		Actual: No
INSPECT ALL EXTERIOR SIDES OF UNIT. ANY VISIBLE DAMAGE	Design: No	Actual: No
SPEED CONTROL VOLTAGE	Design: 65	Actual: N/A

ECPs

ECP 1 - DCV-2111 (EP1) (EP1)

Package #: DCV-2111

Other Notes:

N/A



Smart Control

ROOM TEMPERATURE OFFSET	Design: 21	Actual: 21
HOW MANY FAN ZONES ARE THERE	Design: 1	Actual: 1
HYSTERESIS TEMPERATURE		Actual: 2
Room Sensor Type		Actual: Preset
What is Preset temperature set to?		Actual: 75

ALL TEMP SENSORS ARE WIRED IN	Design: Yes	Actual: Yes
Do any of the light circuits exceed 1400W?	Design: No	Actual: No
ALL LIGHTS WORK	Design: Yes	Actual: Yes
ALL FAULTS CLEARED	Design: Yes	Actual: Yes
ECPM03 HARDWARE REVISION	Design: 04	Actual: 04
ECPM03 PROGRAM VERSION	Design: 2.15.04	Actual: 2.15.04
CASHMI HARDWARE REVISION	Design: 03	Actual: 03
CASHMI PROGRAM VERSION	Design: 2.15.04	Actual: 2.15.04
ECPM03 DATE AND TIME ACCURATE	Design: Yes	Actual: Yes
Smoke Test Performed on all Hoods? Upload Video	Design: Yes	Actual: Yes

Other Notes:

N/A

See attachment(s): [20230317132904.mp4]

DCV

120V Line Ran from SF1 for MUA(s)	Design: Yes	Actual: Yes
Damper interlock wiring ran to MAU?	Design: Yes	Actual: No

BMS & Monitoring

Installation Notes:

Scada not installed at time of sdv



BMS TYPE	Design: CASLink	Actual: CASLink
CASLINK COMMUNICATION TYPE	Design: Cellular	Actual: Cellular
Cellular status is Active Online?	Design: Yes	Actual: No
CASLink Registration Wizard was completed?	Design: Yes	Actual: No
CASLink Module has a current heartbeat?	Design: Yes	Actual: No
All devices connected to the SCADA are reporting live data?	Design: Yes	Actual: No
Devices were assigned to an area and named appropriately?	Design: Yes	Actual: No

Sensors

T2

SENSOR TYPE	Design: Duct Stat	Actual: Duct Stat
SENSOR LOCATION	Design: H1CV1	Actual: h1cv1
FAN NUMBER	Design: 1	Actual: 1

T3

SENSOR TYPE	Design: Duct Stat	Actual: Duct Stat
SENSOR LOCATION	Design: N/A	Actual: h2r1
FAN NUMBER	Design: 4	Actual: 4

T4

SENSOR TYPE	Design: PSP	Actual: Duct Stat
SENSOR LOCATION	Design: Hood 1	Actual: h3r1
FAN NUMBER	Design: 0	Actual: 0

VFDs

VFD 1

DESIGN CFM	Design: 2550	Actual: 2220
FAN DIRECTION	Design: Forward	Actual: Forward
TEMP SENSOR #s ASSIGNED	Design: T2	Actual: t2

DCV VFD

MODULATION RANGE	Design: 45	Actual: 45
OVERLOAD = P108	Design: 74	Actual: 74
MIN HZ	Design: 37.6	Actual: 35.6
MAX HZ	Design: 47	Actual: 45
ALL FAULTS CLEARED = P197 P508	Design: Yes	Actual: Yes
LOAD IN SEPARATE CONDUIT.	Design: Yes	Actual: Yes

VFD 2 - NOT AVAILABLE!

DESIGN CFM	N/A
FAN DIRECTION	N/A
TEMP SENSOR #s ASSIGNED	N/A

DCV VFD

MODULATION RANGE	N/A
OVERLOAD = P108	N/A
MIN HZ	N/A
MAX HZ	N/A
ALL FAULTS CLEARED = P197 P508	N/A
LOAD IN SEPARATE CONDUIT.	N/A

VFD 3

DESIGN CFM	Design: 4450	Actual: 2814
FAN DIRECTION	Design: Forward	Actual: Forward

DCV VFD

SUPPLY FAN # ASSIGNED	Design: 2	Actual: 2
OVERLOAD = P108	Design: 89	Actual: 89
MAX HZ	Design: 54.6	Actual: 36.6
ALL FAULTS CLEARED = P197	Design: Yes	Actual: Yes
P508		Actual: 4.1
LOAD IN SEPARATE CONDUIT.	Design: Yes	Actual: Yes

CORE

NONE