

SDV Job #: 5465095 - LIVERY (MONTGOMERY,OH)**Service Region:** 361 - Cincinnati OH Service
Service Person: Travis Huff**Customer Number:** 866644 **Customer Name:** NATIONAL TAB**Address:** Livery Restaurant
9320 Montgomery Rd
Montgomery, OH 45242**Region Job #:** 5159811
Region Job Name: LIVERY (MONTGOMERY,OH)**Sales Region:** 120 - Air Solutions
Sales Person: Joe Hertenstein**Created By:** Travis Huff **Creation Date:** 2/20/2023 10:16 AM
Last Modified By: Travis Huff **Last Modified Date:** 2/27/2023 5:01 PM**Dining Room Pressure:** 0 **Kitchen Pressure:** 0
Hours On Job: 0 **Extra Hours:** 0**Completed:** Yes **Completed By:** Travis Huff
Completion Date: 2/27/2023 5:01 PM**UDS**

NONE

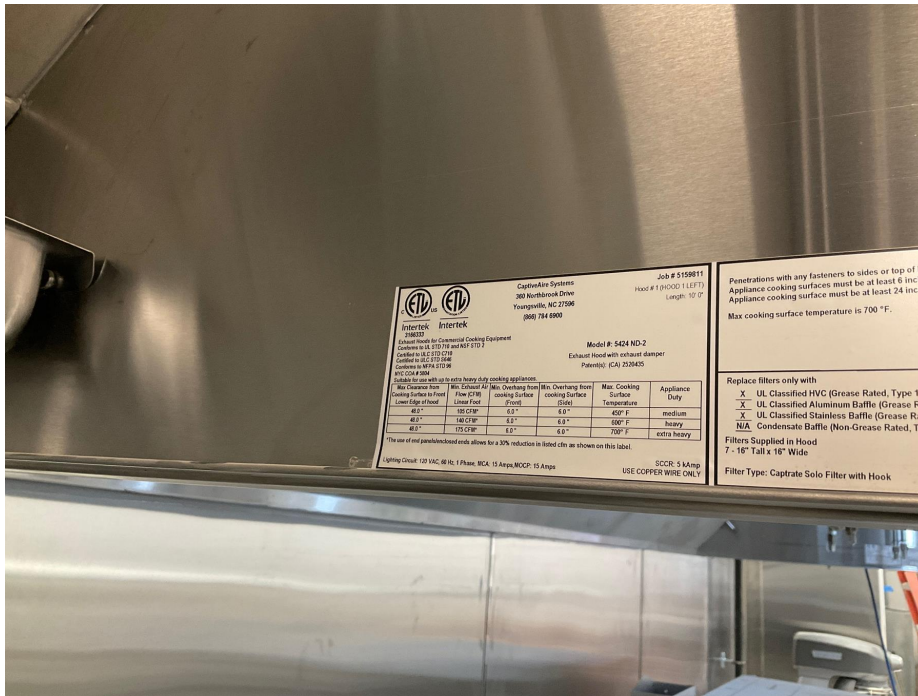
Hood Group 1**Exhaust CFM:** Design = 4390 Initial = 3833 Final = 4073 (92.8% of design)
Supply CFM: Design = 3785 Initial = 3497 Final = 3497 (92.4% of design)**Other Notes:**

Exhaust fan at FLA, unable to increase speed any further. Notified sales office who was on site. Duct to PSP missing in several locations for MAU, I was advised to measure CFM for MAU for hoods it was actually feeding until missing duct is installed.

Hood 1 (HOOD 1 LEFT) (HOOD 1 LEFT)**Model:** 5424ND-2-PSP-F **Length:** 10' 0.00"
Exhaust CFM: Design = 2300 Initial = 1776 Final = 2127 (92.5% of design)

Other Notes:

N/A



Installation

Hung Using appropriate material to safely secure hood.

Design: **Yes**

Actual: **No**

Other Notes:

No double-nut.

COOKING EQUIPMENT ON AND OPERATING

Design: **Yes**

Actual: **No**

COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE

Design: **Yes**

Actual: **Yes**

END PANELS INSTALLED CORRECTLY

Design: **Yes**

Actual: **No**

Other Notes:

Quarter end panel not installed. Wall used as end panel.



INITIAL POSITION OF BALANCE DAMPER

Actual: **0**

POSITION OF BALANCE DAMPER AFTER AIRFLOW

Actual: **0**

Was a smoke test performed on Hood System?

Design: **Yes**

Actual: **Yes**

Filters

Type:

Captrate Solo

Filter 1

Fan: Other

Size: 16x16

Initial Velocity: 169 fpm

Final Velocity: 182 fpm

Initial CFM: 274

Final CFM: 295

Filter 2

Fan: Other

Size: 16x16

Initial Velocity: 156 fpm

Final Velocity: 187 fpm

Initial CFM: 253

Final CFM: 303

Filter 3

Fan: Other

Size: 16x16

Initial Velocity: 170 fpm

Final Velocity: 197 fpm

Initial CFM: 275

Final CFM: 319

Filter 4

Fan: Other

Size: 16x16

Initial Velocity: 168 fpm

Final Velocity: 201 fpm

Initial CFM: 272

Final CFM: 326

Filter 5

Fan: Other

Size: 16x16

Initial Velocity: 161 fpm

Final Velocity: 194 fpm

Initial CFM: 261

Final CFM: 314

Filter 6

Fan: Other

Size: 16x16

Initial Velocity: 138 fpm

Final Velocity: 178 fpm

Initial CFM: 224

Final CFM: 288

Filter 7

Fan: Other

Size: 16x16

Initial Velocity: 134 fpm

Final Velocity: 174 fpm

Initial CFM: 217

Final CFM: 282

Supply

Supply CFM: Design = 1850 Initial = 828 Actual = 828 (44.8% of design) Fan: Other

PSP 1

Orientation: Front **Length:** 10' 0.00" **Width:** 16.00" **Banks:** 1
Blanks: 1
CFM: Design = 1848 Initial = 828 Final = 828 (44.8% of design)
Velocity: Design = 159 Initial = 71 Final = 71 (44.7% of design)

Readings:

Other Notes:

No duct ran from MAU to far left PSP of hood, notified sales office.

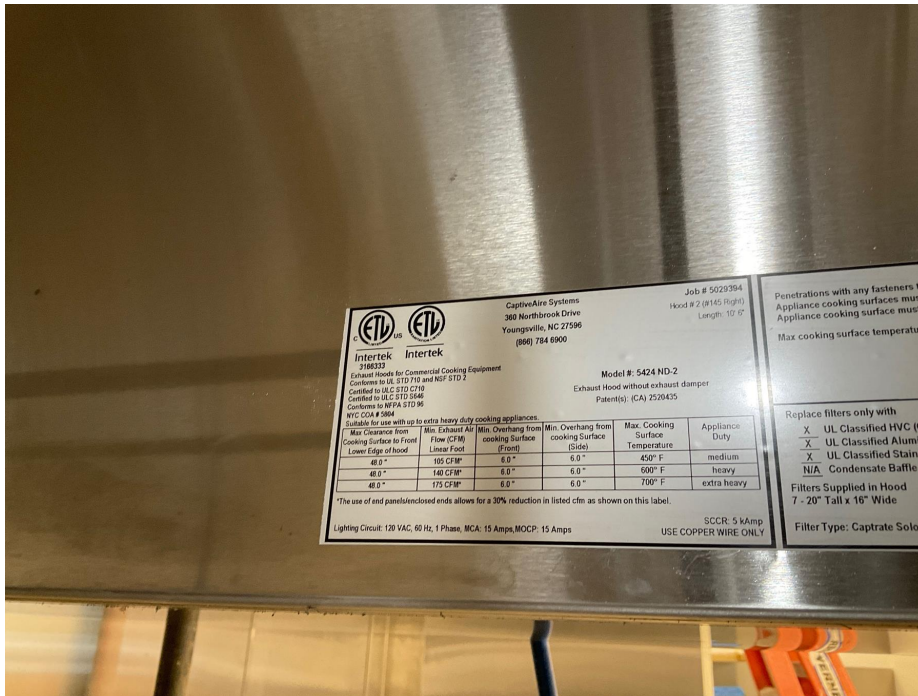
1: Initial: 1 fpm, Final: 1 fpm 2: Initial: 1 fpm, Final: 1 fpm 3: Initial: 1 fpm, Final: 1 fpm 4: Initial: 1 fpm, Final: 1 fpm
5: Initial: 1 fpm, Final: 1 fpm 6: Initial: 75 fpm, Final: 75 fpm 7: Initial: 74 fpm, Final: 74 fpm
8: Initial: 168 fpm, Final: 168 fpm 9: Initial: 220 fpm, Final: 220 fpm 10: Initial: 172 fpm, Final: 172 fpm

Hood 2 (HOOD 1 RIGHT) (HOOD 1 RIGHT)

Model: 5424ND-2-PSP-F **Length:** 11' 0.00"
Exhaust CFM: Design = 2090 Initial = 2057 Final = 1946 (93.1% of design)

Other Notes:

N/A



Installation

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

Other Notes:

No double-nut.

COOKING EQUIPMENT ON AND OPERATING Design: **Yes** Actual: **No**

COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE Design: **Yes** Actual: **Yes**

END PANELS INSTALLED CORRECTLY Design: **Yes** Actual: **No**

Other Notes:

Right quarter end panel not installed.



INITIAL POSITION OF BALANCE DAMPER Actual: **0**

POSITION OF BALANCE DAMPER AFTER AIRFLOW Actual: **50**

Was a smoke test performed on Hood System? Design: **Yes** Actual: **Yes**

Filters

Type: Captrate Solo

Filter	Size	Initial Velocity	Final Velocity	Initial CFM	Final CFM
Filter 1 Fan: Other	16x16	151 fpm	154 fpm	245	249
Filter 2 Fan: Other	16x16	169 fpm	157 fpm	274	254
Filter 3 Fan: Other	16x16	161 fpm	150 fpm	261	243
Filter 4 Fan: Other	16x16	172 fpm	159 fpm	279	258
Filter 5 Fan: Other	16x16	173 fpm	163 fpm	280	264
Filter 6 Fan: Other	16x16	153 fpm	143 fpm	248	232
Filter 7 Fan: Other	16x16	158 fpm	156 fpm	256	253
Filter 8 Fan: Other	16x16	132 fpm	119 fpm	214	193

Supply

Supply CFM: Design = 1935 Initial = 2669 Actual = 2669 (137.9% of design) Fan: Other

PSP 1

Orientation: Front **Length:** 12' 0.00" **Width:** 16.00" **Banks:** 1
Blanks: 1
CFM: Design = 1935 Initial = 2669 Final = 2669 (137.9% of design)
Velocity: Design = 140 Initial = 193 Final = 193 (137.9% of design)

Readings:

1: Initial: 162 fpm, Final: 162 fpm 2: Initial: 175 fpm, Final: 175 fpm 3: Initial: 188 fpm, Final: 188 fpm
4: Initial: 174 fpm, Final: 174 fpm 5: Initial: 119 fpm, Final: 119 fpm 6: Initial: 168 fpm, Final: 168 fpm
7: Initial: 208 fpm, Final: 208 fpm 8: Initial: 223 fpm, Final: 223 fpm 9: Initial: 236 fpm, Final: 236 fpm
10: Initial: 209 fpm, Final: 209 fpm 11: Initial: 213 fpm, Final: 213 fpm 12: Initial: 213 fpm, Final: 213 fpm

Hood Group 2

Exhaust CFM: Design = 1050 Initial = 970 Final = 970 (92.4% of design)
Supply CFM: Design = 945 Initial = 6 Final = 6 (0.6% of design)

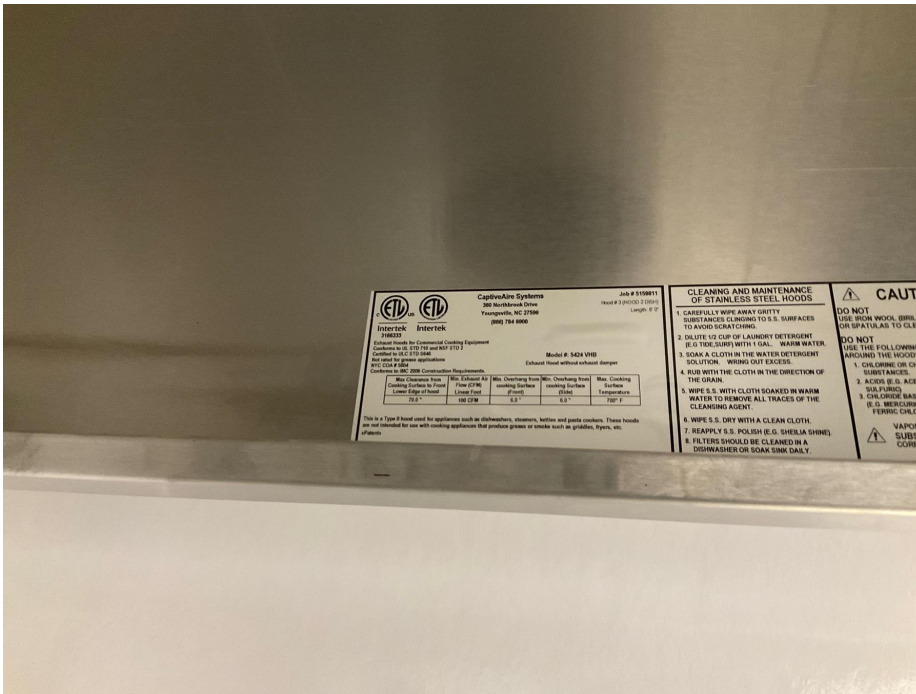
Hood 3 (HOOD 2 DISH) (HOOD 2 DISH)

Model: 5424VHB-G-PSP-F **Length:** 8' 0.00"
Exhaust CFM: Design = 1050 Initial = 970 Final = 970 (92.4% of design)

Other Notes:

Unable to gain access to fan in order to increase speed.

See attachment(s): [20230220141236.mp4]



Installation

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

Other Notes:

No double-nut.

COOKING EQUIPMENT ON AND OPERATING Design: **Yes** Actual: **Yes**

COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE Design: **Yes** Actual: **Yes**

Was a smoke test performed on Hood System? Design: **Yes** Actual: **Yes**

Supply

Supply CFM: Design = 945 Initial = 6 Actual = 6 (0.6% of design) Fan: Other

PSP 1

Orientation: Front **Length:** 8' 0.00" **Width:** 12.00" **Banks:** 1
Blanks: 1
CFM: Design = 944 Initial = 6 Final = 6 (0.6% of design)
Velocity: Design = 148 Initial = 0 Final = 0 (0% of design)

Readings:

Other Notes:

No duct work running to PSP from MAU.

1: Initial: 1 fpm, Final: 1 fpm 2: Initial: 1 fpm, Final: 1 fpm 3: Initial: 1 fpm, Final: 1 fpm 4: Initial: 1 fpm, Final: 1 fpm
5: Initial: 1 fpm, Final: 1 fpm 6: Initial: 1 fpm, Final: 1 fpm 7: Initial: 1 fpm, Final: 1 fpm 8: Initial: 1 fpm, Final: 1 fpm

AQEs

NONE

Fans

NONE

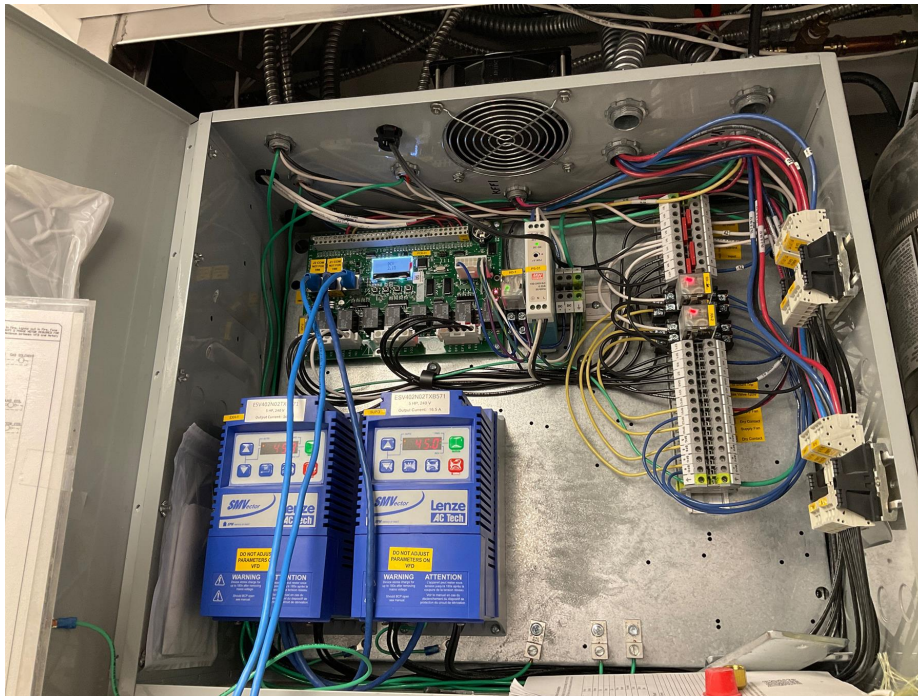
ECPs

ECP 1 - DCV-1111_MA4 (EMS1) (EMS1)

Package #: DCV-1111_MA4

Other Notes:

N/A



INDUSTRIAL CONTROL PANEL FOR INDUSTRIAL MACHINERY

CaptiveAire Systems
 360 Northbrook Drive
 Youngsville, NC 27586
 (866) 784 6900

Job # 5159811
 06/2022
 Electrical Package #1
 Model #: DCV-1111_MA4

Intertek
 3186333
 ETL LISTED
 Confirms to UL STD 508A
 Certified to CSA STD C22.2 #14
 Certified to UL STD 844ULC-S527

TYPE 1 - FOR INDOOR USE ONLY, DRY LOCATION
 TAG: EMS1
 RATED AMBIENT AIR TEMPERATURE: 32°F (0°C) - 132°F (54.4°C)
 CAUTION: MORE THAN ONE POWER SOURCE IS FEEDING THIS EQUIPMENT. DISCONNECT ALL POWER SOURCES BEFORE SERVICING!
 CAUTION: FIRE SYSTEM MUST BE ARMED AND MICRO-SWITCH WIRED TO ENSURE PROPER FAN OPERATION.

Smart Control

GAS VALVE RESET WORKS	Design: Yes	Actual: Yes
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	Design: No	Actual: No

Do any of the light circuits exceed 1400W?

Design: **No**

Actual: **No**

ALL LIGHTS WORK

Design: **Yes**

Actual: **No**

Other Notes:

Only two lightbulbs installed in hood.



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

DCV

120V Line Ran from SF1 for MUA(s)	Design: Yes	Actual: Yes
Damper interlock wiring ran to MAU?	Design: Yes	Actual: Yes

VFDs

VFD 1

DESIGN CFM	Design: 4390	Actual: 4073
FAN DIRECTION	Design: Forward	Actual: Forward
TEMP SENSOR #s ASSIGNED	Design: T2, T3	Actual: T2, T3

DCV VFD

MODULATION RANGE	Design: 45	Actual: 45
OVERLOAD = P108	Design: 94	Actual: 93
MIN HZ	Design: 37.8	Actual: 39.9
MAX HZ	Design: 47.3	Actual: 49.9
ALL FAULTS CLEARED = P197 P508	Design: Yes	Actual: Yes
LOAD IN SEPARATE CONDUIT.	Design: Yes	Actual: Yes

VFD 2

DESIGN CFM	Design: 4835	Actual: 3497
FAN DIRECTION	Design: Forward	Actual: Forward

DCV VFD

SUPPLY FAN # ASSIGNED	Design: 3	Actual: 3
OVERLOAD = P108	Design: 90	Actual: 90
MAX HZ	Design: 66	Actual: 45
ALL FAULTS CLEARED = P197 P508	Design: Yes	Actual: Yes
LOAD IN SEPARATE CONDUIT.	Design: Yes	Actual: Yes

TANK

TANK ECP 1 (EMS1)

Location : Hood #2 5424ND-2-PSP-F: Utility Cabinet Wall Mounted

Other Notes:

PAK's for Tank system replaced due to shipping prior to 8/2022.

Building Alarm Tied In	Design: Yes	Actual: No
Trouble Relay Tied In	Design: Yes	Actual: No
TANK Board Version	Design: N/A	Actual: 1.63
TANK Board Updated to latest Software Version		Actual: Yes
TANK Board Software Version	Design: N/A	Actual: 1.9
Internet Connection Type		Actual: Cellular

TANK Fire Suppression 1 (TANK)

Location : Hood #2 - Utility Cabinet Right

Electrician

TANK Control Panel Wired	Design: Yes	Actual: Yes
UDS Appliance Kill Switch (if equipped) Wired	N/A	

Fire System Contractor w/CAS Supervision

Verify kitchen line up with drawings in NOLA?		Actual: Correct
Actuator is in Shipped position with shipping plates mounted upon arrival? Upload Picture.	Design: Yes	Actual: Yes

Other Notes:

N/A





Gas Valve is Functioning Properly	Design: Yes	Actual: Yes
Gas Valve Wired (In Conduit)	Design: Yes	Actual: Yes
Are all overlapping nozzles within 35-50" of cooking surface?	Design: Yes	Actual: Yes
Nozzles Within 15" From Front/Back of Hazard Zone	Design: Yes	Actual: Yes
Verify overlapping nozzles are located at centerline of the 30" hazard zone (front to back) same height, aimed straight down?	Design: Yes	Actual: Yes
Is there a Salamander or Upright Broiler Present?	Design: Yes	Actual: No
Does the depth of any appliance cooking surface exceed the listed size in the Appliance Coverage Detail chart?	Design: No	Actual: No
All dedicated appliances, duct and plenum are utilizing TANK appliance nozzles (3070-3/8H-10-SS)?	Design: Yes	Actual: Yes
Is end plenum nozzle installed 0-6" into plenum (From end of hood/hazard to center of nozzle)?	Design: Yes	Actual: Yes
Are TANK appliance nozzles spaced no more than 12"(From end of Hazard zone to center of first nozzle and end of hazard zone to center of last nozzle)?	Design: Yes	Actual: Yes
Did the appliance lineup change from the original design?	Design: No	Actual: No
Did the fire system appliance drops change from the original design?	Design: No	Actual: No
Does Fire System cover a Wok?		Actual: No
Does dedicated TANK appliance nozzle piping exceed maximum pipe length of 10 ft?	Design: No	Actual: No
Does plenum branch piping exceed maximum pipe length of 3ft?	Design: No	Actual: No
Does the Supply line piping to first overlapping nozzle exceed 42 ft?	Design: No	Actual: No
Is Back-shelf a minimum of 18" Vertically off Appliance	N/A	
Back-shelf Overhang less than 12"	N/A	
No appliance drop has more than 2 nozzles?	Design: True	Actual: True

Is all piping except appliance drops 3/8" Blackiron, Chrome plated, Stainless Steel or 1/2" Copper?	Design: Yes	Actual: Yes
Is all appliance drop piping 3/8" polished stainless steel or polished chrome-plated black iron?		Actual: Yes
Tilt Skillet and Fryers are Covered Adequately	Design: Yes	Actual: Yes
Manual Activation Device Wired into a Fire Loop (Must be 4 wire, in conduit)	Design: Yes	Actual: Yes
MAD Installed 10'-20' from Hood at a Point of Egress and 42"-48" AFF	Design: Yes	Actual: Yes

Extra Fire Stat Added **N/A**

Fire stats are wired in a fire loop with 842 degree high temp wire when ran on top of hoods	Design: Yes	Actual: Yes
CAS Service Supervised, Assisted or Wired All Supervised Loop Connections		Actual: Supervised

CAS Service

Fire System Activates on Battery Backup	Design: Yes	Actual: Yes
System Activates on 120V power only	Design: Yes	Actual: Yes
Manual Activation Device Reset button resets system.	Design: Yes	Actual: Yes
Audible Alarm Sounds	Design: Yes	Actual: Yes
Battery Date Code (The actual date FST wrote on batteries with paint pen during SDV)		Actual: 2/21/2023 11:32:05 PM
Verify the correct amount of TANK appliance nozzles cover the cross-sectional Perimeter or Diameter of the Duct Riser? (If 0 - 75" perimeter equals 1 nozzles, 75 - 150" 2 nozzles, above 150" 3 nozzles)	Design: Yes	Actual: Yes
Is the system commissioned with the actuator bolted onto the TANK Fire Suppression system tank? Upload Picture.	Design: Yes	Actual: No

Other Notes:

N/A





Is pressure switch installed and functioning properly?

Design: **Yes**

Actual: **Yes**

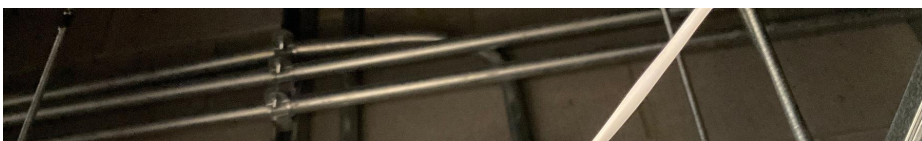
Monitor the pressure gauge on the PAK. The pressure must not read above 0.5 psi for a minimum of 15 minutes.

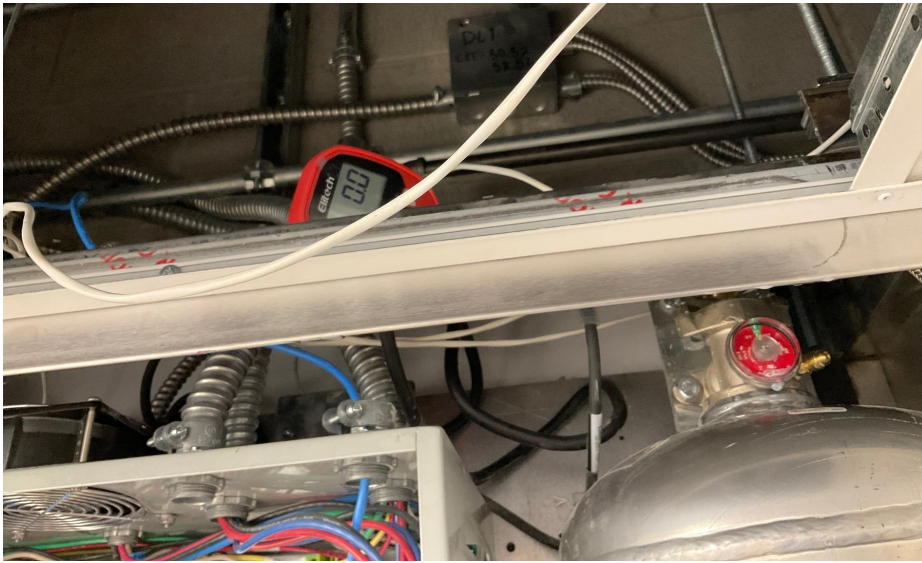
Design: **N/A**

Actual: **Complete**

Other Notes:

N/A





CAUTION!: If pressure reads above 0.5 psi, immediately remove the primary actuator hose from the primary tank

Actual: **Ok**

Is appliance specific protection piped with adequate protection? Upload picture.

Design: **Yes**

Actual: **Yes**

Other Notes:

N/A





Use coil liquid leak detector around PAK and braided hose to check for leaks. Are there any leaks present?

Design: **No**

Actual: **No**

Do TANK bottles have 200 PSI with gauges functioning properly? Upload picture

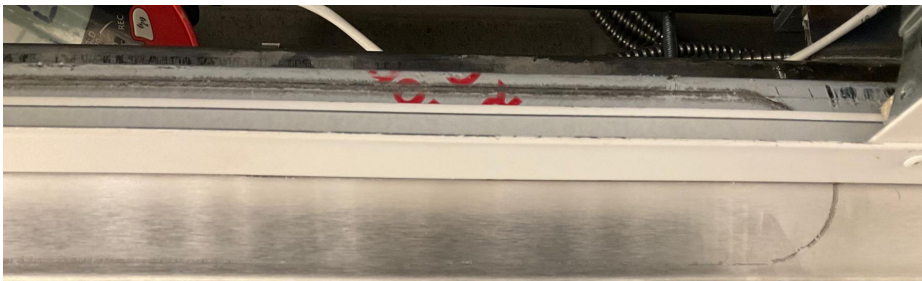
Design: **Yes**

Actual: **Yes**

Other Notes:

N/A





Do all nozzles have metal caps?

Design: **Yes**

Actual: **Yes**

Verify Nozzle Flow Points/Tank Capabilities. Does Nozzles FP exceed Tank Capacity?

Design: **No**

Actual: **No**

Take a photo of Fire System Tag

Actual: **Ok**

Tanks installed securely with straps and mounting hardware?

Design: **Yes**

Actual: **Yes**

After inspection of system, lubricate and change O-ring of primary actuator hose (p/n 19020).

Design: **Replaced**

Actual: **Replaced**

All Faults Are Cleared

Design: **Yes**

Actual: **Yes**

Are DIP switches set correctly according to number of Fire Groups?

Design: **Yes**

Actual: **Yes**

NONE

PCU Installations

NONE