

FOR QUESTIONS, CALL THE
Highwoods Group
REGION 40
PHONE: (919) 875 - 0420
EMAIL: reg40@captiveaire.com

PATENT NUMBERS
EXHAUST HOODS ND-2/BD-2/SND-2 (CANADA) - CA PATENT 2520435 C.

HOOD INFORMATION - JOB#7115877

| HOOD NO | TAG | MODEL | MANUFACTURER | LENGTH | MAX COOKING TEMP | TYPE | APPLIANCE DUTY | DESIGN CFM/FT | TOTAL EXH CFM | EXHAUST PLENUM RISER(S) | | | | HOOD CONSTRUCTION | HOOD CONFIG | | | |
|---------|-----|-----------|--------------|--------|------------------|------|----------------|---------------|---------------|-------------------------|------|--------|------|-------------------|-------------|----------------------|-------|------------|
| | | | | | | | | | | WIDTH | LENG | HEIGHT | DIA | | CFM | VEL | SP | END TO END |
| 1 | | 5424 ND-2 | CAPTIVEAIRE | 9' 4" | 600 DEG | I | HEAVY | 204 | 1900 | 10" | 18" | 4" | 1900 | 1520 | -0.818' | 430 SS WHERE EXPOSED | ALONE | ALONE |

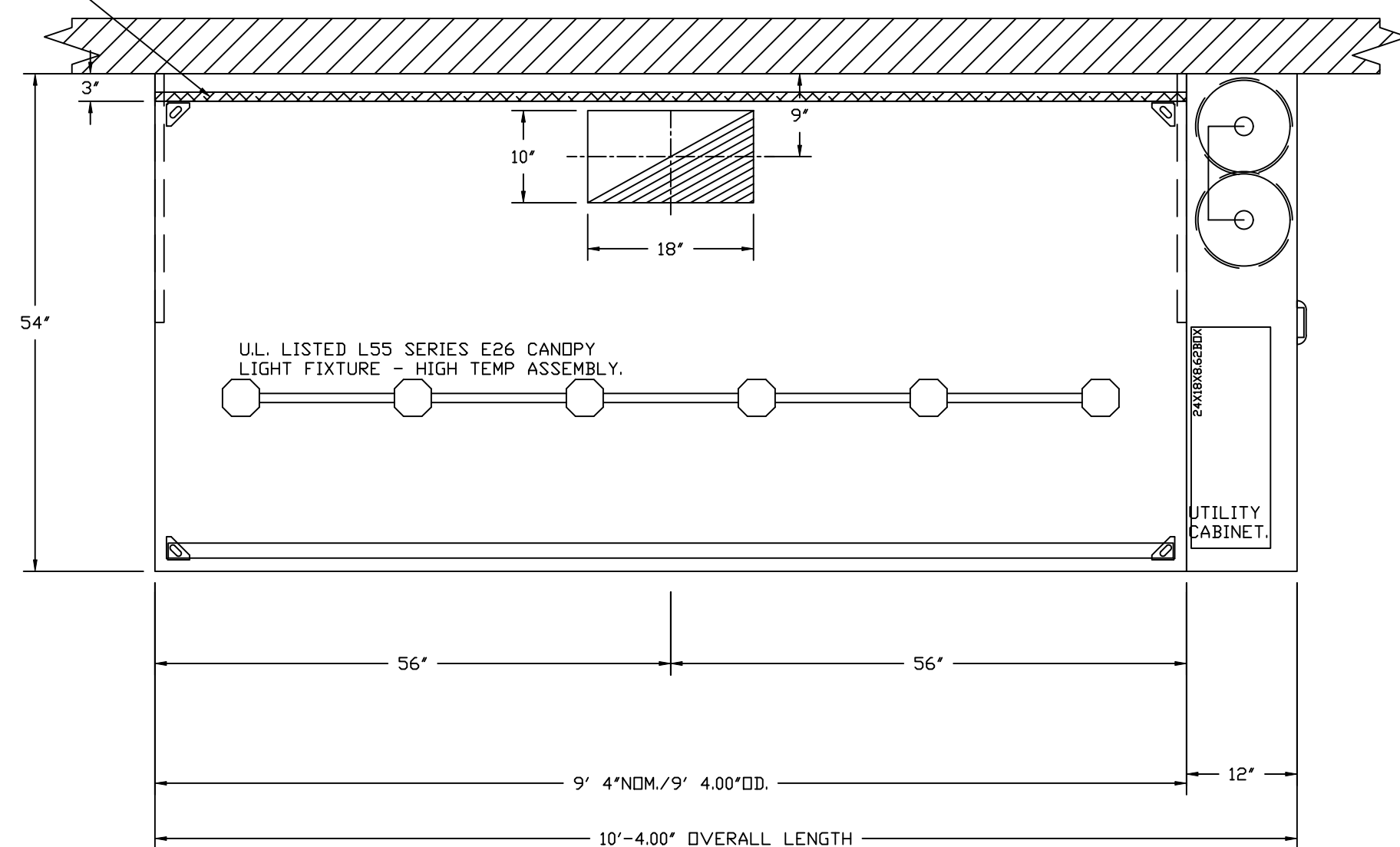
HOOD INFORMATION

| HOOD NO | TAG | FILTER(S) | | | | LIGHT(S) | | | | UTILITY CABINET(S) | | | | FIRE SYSTEM PIPING | HOOD HANGING WEIGHT | | |
|---------|-----|----------------------|-----|--------|--------|------------------------|-----|----------------|------------|--------------------|-------------|------------------|---------|--------------------|---------------------|--------------------|-------------------|
| | | TYPE | QTY | HEIGHT | LENGTH | EFFICIENCY @ 7 MICRONS | QTY | TYPE | WIRE GUARD | LOCATION | SIZE | FIRE SYSTEM TYPE | SIZE | | | ELECTRICAL MODEL # | SWITCHES QUANTITY |
| 1 | | CAPRATE SOLID FILTER | 7 | 16" | 16" | 85% SEE FILTER SPEC | 6 | L55 SERIES E26 | NO | RIGHT | 12"x54"x24" | TANK FS | 4.0/4.0 | SC-310110MA | 1 LIGHT 1 FAN | YES | 1011 LBS |

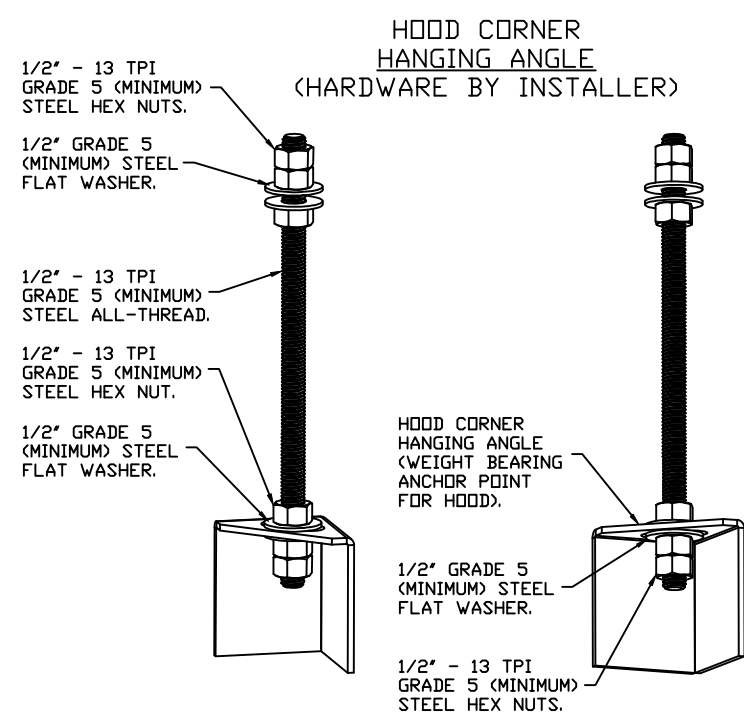
HOOD OPTIONS

| HOOD NO | TAG | OPTION |
|---------|-----|---|
| 1 | | FIELD WRAPPER 10.00' HIGH FRONT, LEFT, RIGHT. INSULATION FOR BACK OF HOOD. RISER SENSOR INSTALL 6IN PLEN. RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS. LEFT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS. FULL DIMENSION HANGING BRACKET - FRONT. |

1" LAYER OF INSULATION FACTORY INSTALLED IN INTERNAL BACK STANDOFF. MEETS 0 INCH REQUIREMENTS FOR CLEARANCE TO COMBUSTIBLE SURFACES.

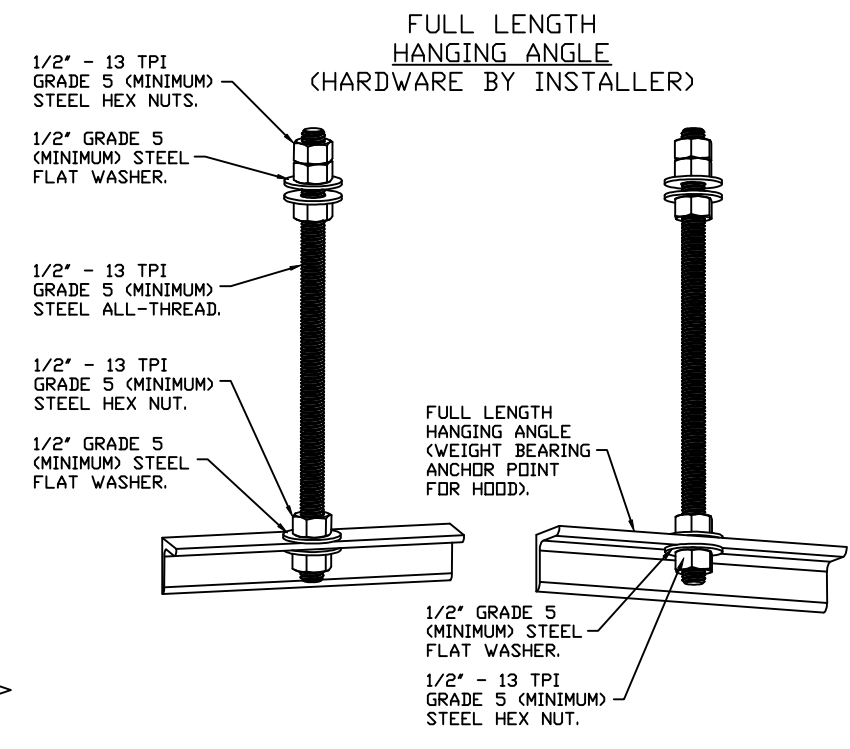


PLAN VIEW - HOOD #1
9' 4.00" LONG 5424ND-2



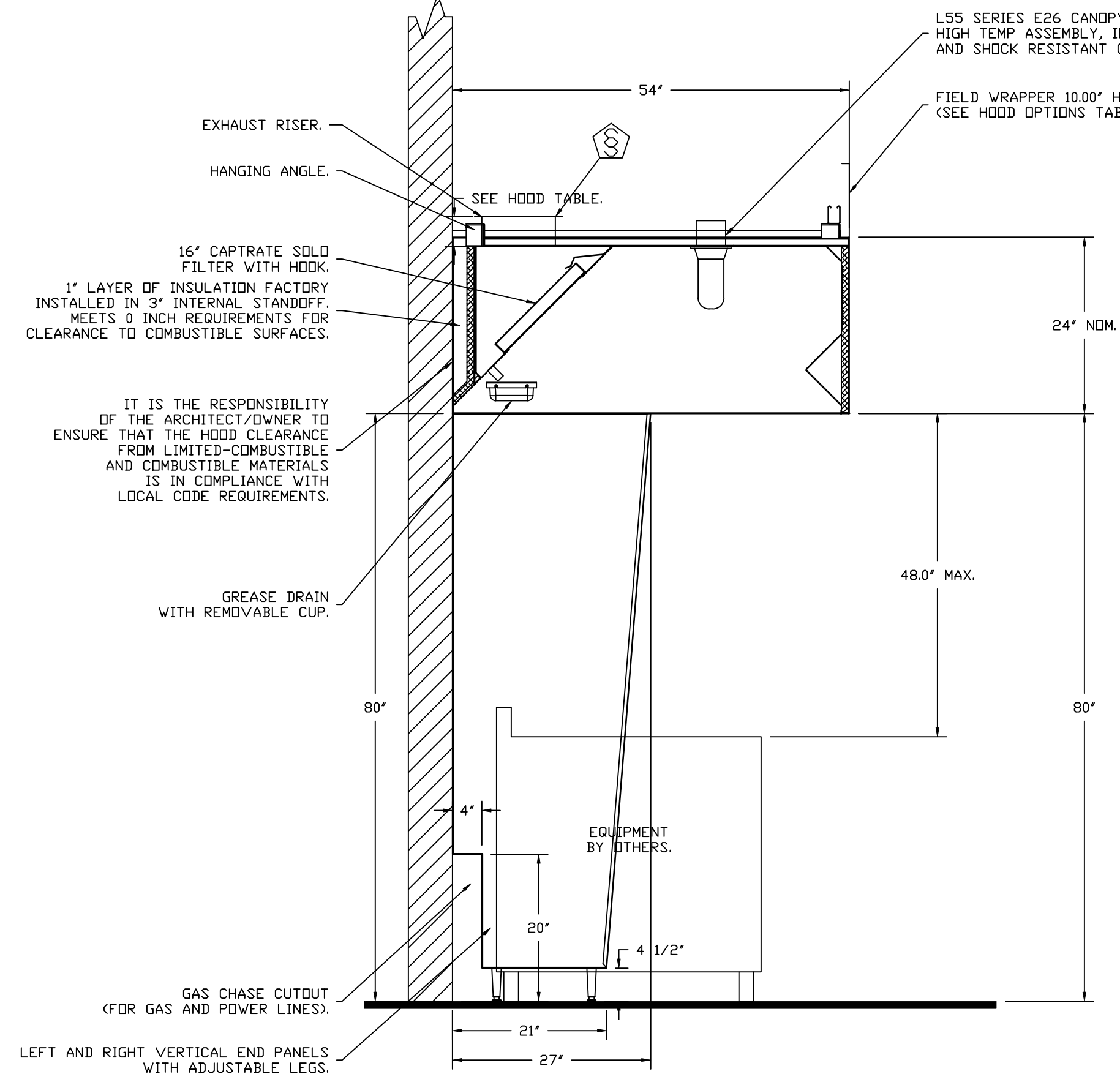
ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR FULL LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



SECTION VIEW - MODEL 5424ND-2
HOOD - #1

SPECIFICATION: CAPRATE® GREASE-STOP® SOLID FILTER

THE CAPRATE GREASE-STOP SOLID FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

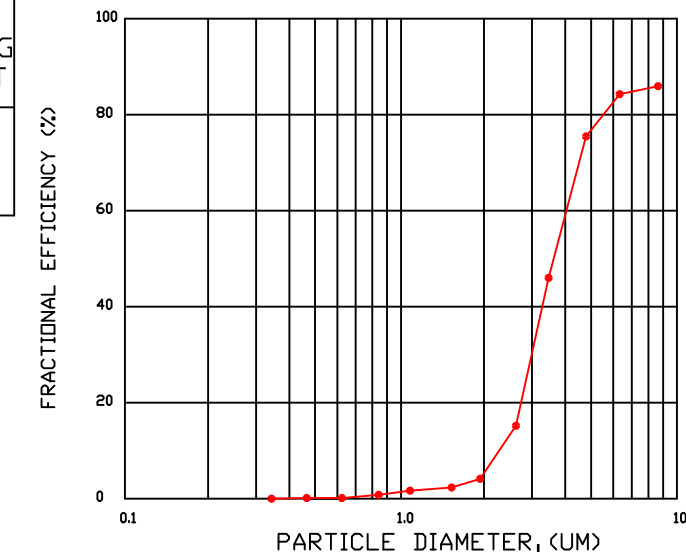
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

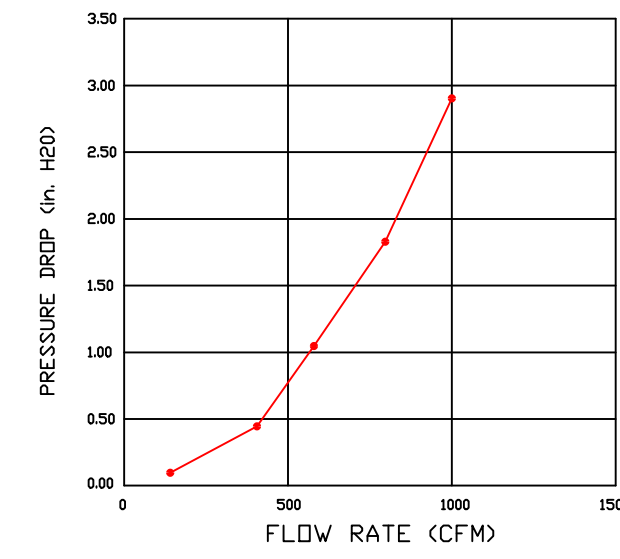
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPRATE GREASE-STOP SOLID WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



CAPRATE FILTERS ARE BUILT IN COMPLIANCE WITH:
NFPA #96.
NSF STANDARD #2.
UL STANDARD #1046.
INT. MECH. CODE (IMC).
ULC-S649.



CLEARANCE TO COMBUSTIBLES

| HOODS # | SURFACE | *CLEARANCE |
|---------|---------|------------|
| 1 | TOP | 18" |
| | FRONT | 0" |
| | BACK | 0" |
| | LEFT | 18" |
| | RIGHT | 0" |

- *0" CLEARANCE TO COMBUSTIBLES CONFORMS TO UL710 STANDARD.
- HOOD MOUNTED UTILITY CABINETS REQUIRE 36" SERVICE CLEARANCE.

BOWMAN: APPROVAL CONTINGENT ON AUTHORITY HAVING JURISDICTION (AHJ) REVIEW AND APPROVAL OF THE SUBMITTED PERMIT DOCUMENTS. BOWMAN CONSULTING GROUP IS NOT LIABLE FOR ANY REVISIONS REQUIRED BY THE AHJ.

Bowman

- No Exceptions Taken Accepted As Noted Rejected
 Resubmit Submit Specified Item Reviewed

Bowman Consulting Group acknowledges its limited review of this document is only for general conformance with the design concept and the information given in the Construction Documents. Corrections or comments made by Bowman Consulting Group on any shop drawings / submittals during this review do not relieve the contractor or sub-contractor from full compliance with all requirements contained in any plans, specifications, construction related contracts, or documents. Review for a specific item shall not include review of an assembly of which the item is a component. Contractor and their subcontractors are responsible for: quantities and dimensions to be conformed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work with that of all other trades and performing all Work in a safe and satisfactory manner.

By: Sam Frank Date: 11/15/2024

REVISIONS

| DESCRIPTION | DATE |
|-------------|------|
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CAPTIVEAIRE

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CHIPOTLE EMPIRE BLVD BROOKLYN NY_R2
1750 Bedford Avenue,
Brooklyn, NY, 11225

DATE: 11/6/2024
DWG.#: 7115877
DRAWN BY: JMB-40
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 1

FIRE SYSTEM INFORMATION - JOB#7115877

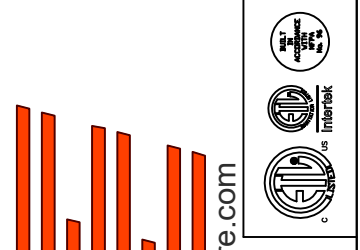
| FIRE SYSTEM NO | TAG | TYPE | SIZE | MAX FP | DESIGN FP | INSTALLATION | |
|----------------|-----|---------|---------|--------|-----------|--------------------|------------------|
| | | | | | | SYSTEM | LOCATION ON HOOD |
| 1 | | TANK FS | 4.0/4.0 | 40 | 28 | FIRE CABINET RIGHT | RIGHT, HOOD 1 |

FIRE SYSTEM PARTS LIST KEY

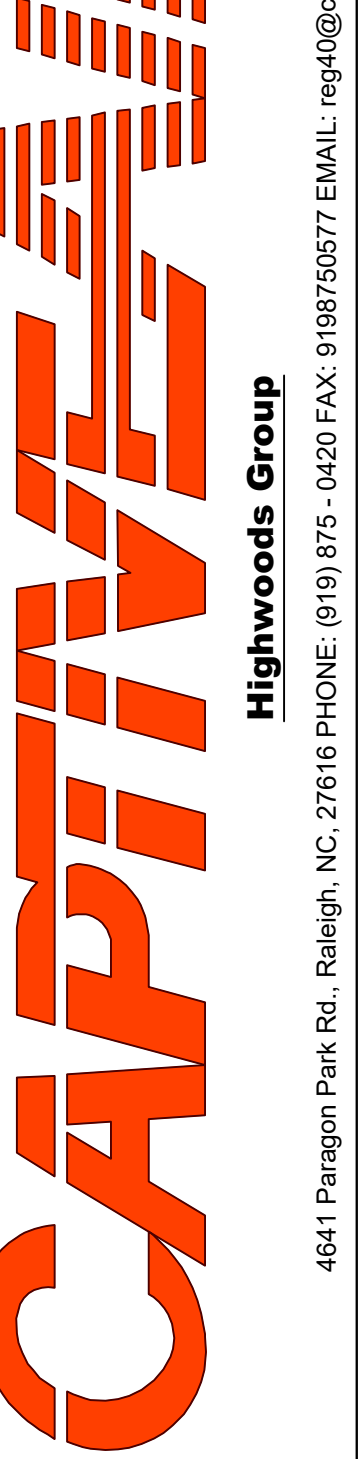
| FIRE SYSTEM NO | TAG | KEY NUMBER - PART DESCRIPTION | QTY BY FACTORY | QTY BY DIST |
|----------------|-----|---|----------------|-------------|
| 1 | | 0 - 0 - TANK FIRE SUPPRESSION POST-DISCHARGE PROCEDURE UTILITY CABINET LABEL SHEET. | 1 | 0 |
| | | 0 - 0 - TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET. | 1 | 0 |
| | | 0 - 0 - 12-F28021-32144-DT-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. ND, CLOSE ON TEMP RISE AT 360°F. (A0034310). | 1 | 0 |
| | | 0 - 0 - 32-00002 QUIK SEAL - 1/2" (UL). | 1 | 0 |
| | | 0 - 0 - 4429K153 1/2" MALE NPT TO 1/2" FEMALE NPT ELBOW, BRASS. | 2 | 0 |
| | | 0 - 0 - 4429K422 1/2" X 1/4" BRASS REDUCING BUSHING. | 1 | 0 |
| | | 0 - 0 - 79525 1/2" 90 PRO-PRESS ELBOW WITH 1/2" NPT FEMALE CONNECTION, VIEGA. | 1 | 0 |
| | | 0 - 0 - 79580 1/2" X 1/2" PRO-PRESS TEE X 1/2" NPT FEMALE CONNECTION, VIEGA. | 2 | 0 |
| | | 0 - 0 - 87-120042-001 SECONDARY ACTUATOR VALVE (SVA) - SINGLE ACTUATOR, REQUIRES PRIMARY RELEASE ACTUATOR, TANK FIRE SUPPRESSION. | 1 | 0 |
| | | 0 - 0 - 87-120045-001 HOSE, SECONDARY ACTUATOR HOSE, 7.5' BRAIDED STAINLESS STEEL, TANK FIRE SUPPRESSION. | 1 | 0 |
| | | 0 - 0 - 87-300001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION. | 2 | 0 |
| | | 0 - 0 - 87-300030-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION. | 1 | 0 |
| | | 0 - 0 - 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION. | 8 | 0 |
| | | 0 - 0 - 9055455PC PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD. | 6 | 0 |
| | | 0 - 0 - 9097200PC PRO PRESS PC611 1/2 PRESS TEE LD. | 5 | 0 |
| | | 0 - 0 - 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION. | 4 | 0 |
| | | 0 - 0 - A0034332 JUNCTION BOX FOR MANUAL PULL STATION. 1.5" DEEP BACK BOX, RED COLOR. | 1 | 0 |
| | | 0 - 0 - A31484 1/4" NPT SCHRADER VALVE AND CAP, JB INDUSTRIES. 1/4" FLARE X 1/4" MPT HALF UNION. USED ON TANK SERVICE PORT. | 1 | 0 |
| | | 0 - 0 - B1145 3/8" BLACK IRON 90 ELL. | 2 | 0 |
| | | 0 - 0 - DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION. | 2 | 0 |
| | | 0 - 0 - TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION. | 6 | 0 |
| | | 0 - 0 - TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION. | 2 | 0 |
| | | 0 - 0 - WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION. | 2 | 0 |
| | | 16 - 16 - 79210 1/2" X 3/8" NPT MALE ADAPTER, VIEGA. | 6 | 0 |
| | | 16 - 16 - DL-F NOZZLE - TANK PROTECTION APPLIANCE COVERAGE NOZZLE (INCLUDES METAL BLOW OFF CAP, LANYARD, USED WITH CHROME-PLATED PIPE). | 6 | 0 |
| | | 26 - 26 - QSA-3/8 QUIK SEAL - 3/8" (UL). | 6 | 0 |
| | | 34 - 34 - A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT. RED COLOR. | 1 | 0 |

REVISIONS

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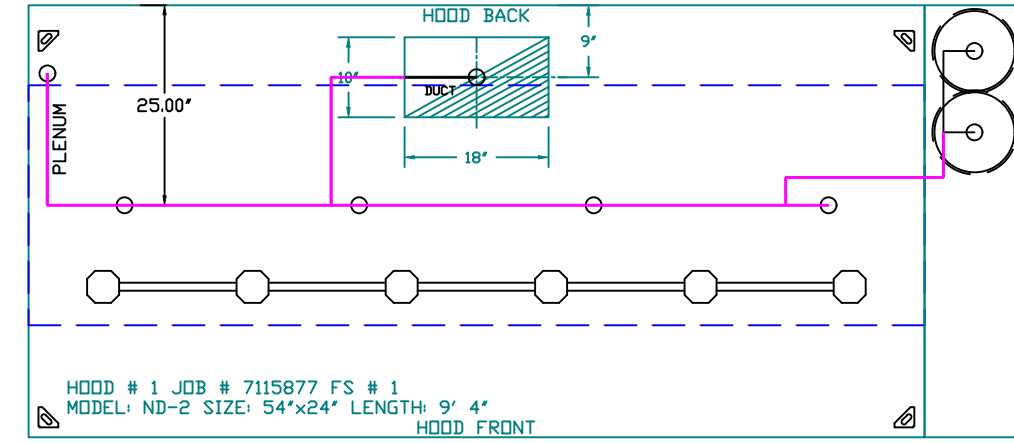
DRAWN BY: JMB-40

SCALE:
3/4" = 1'-0"

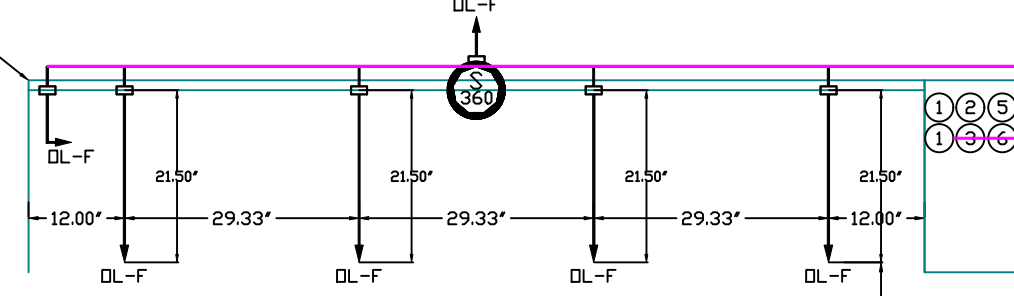
MASTER DRAWING

SHEET NO.
2

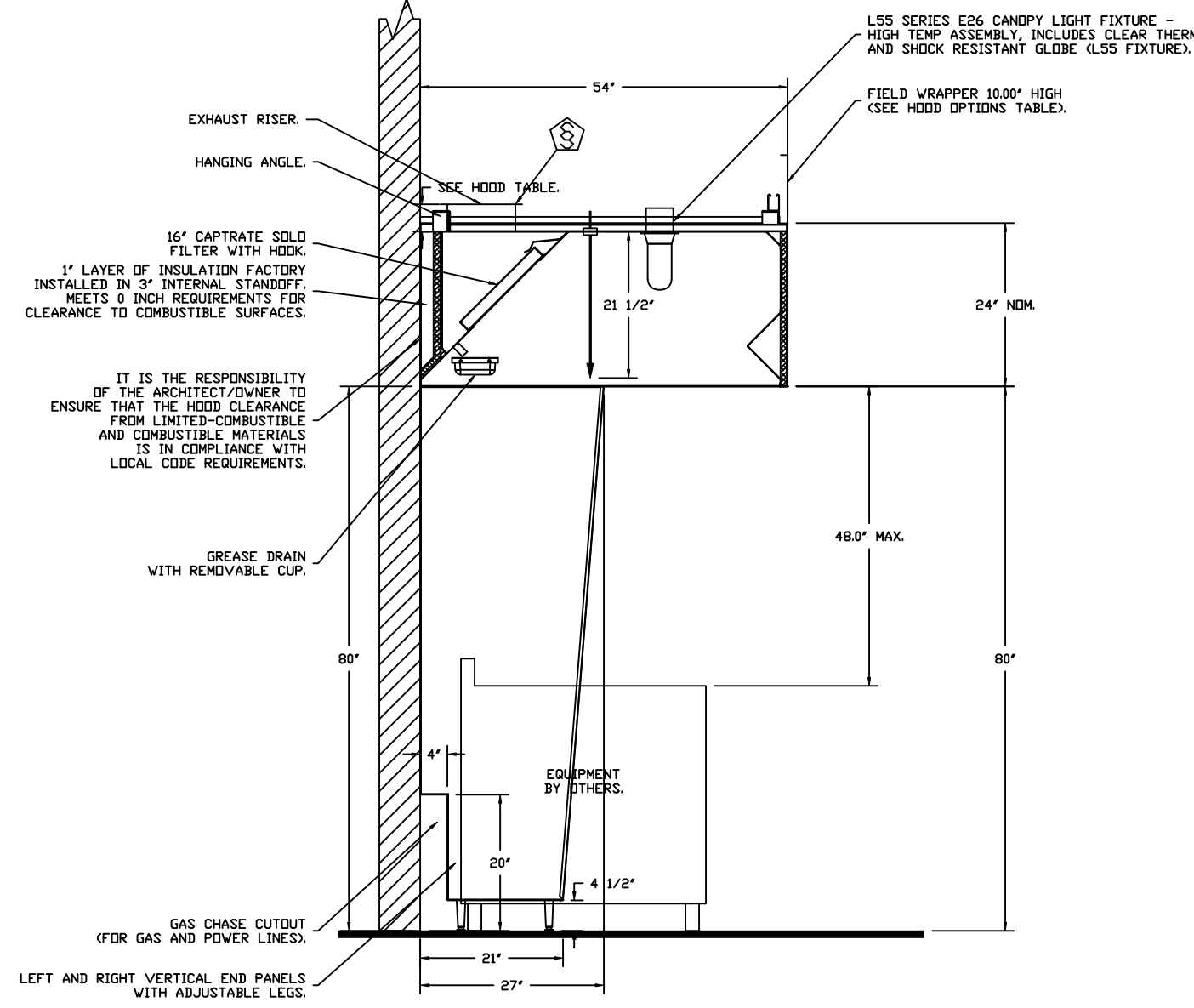
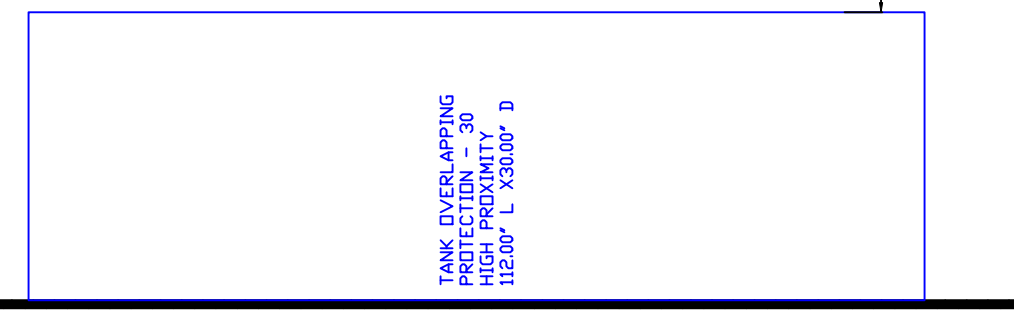
SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.3 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS.



FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.



NOZZLE HEIGHT 35-50" FROM COOKING SURFACE. (45.25")



- NOTES
- FIELD PIPE DROPS AS SHOWN. PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
 - FIELD INSTALLED DROP; FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
 - SHIP LOOSE DROP; FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
 - RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
 - OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
 - IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
 - FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.
- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.
- DL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS
- JOB #: 7115877
- JOB NAME: CHIPOTLE EMPIRE BLVD BROOKLYN NY_R2
- SYSTEM SIZE: TANK-SP-2 DESIGN FP: 28, MAXIMUM FP: 40
- HOOD # 1 9' 4.00' LONG x 54' WIDE x 24' HIGH
- RISER # 1 SIZE: 10" x 18"
- HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.
- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

| AGENT DISTRIBUTION PIPING LIMITATIONS | |
|---|----------------------|
| PIPE SECTION | MAX PIPE LENGTH (FT) |
| MAX SUPPLY LINE TO FIRST OVERLAPPING NOZZLE | 42 |
| OVERLAPPING NOZZLE APPLIANCE BRANCH | 10 |
| DEDICATED NOZZLE APPLIANCE BRANCH | 10 |

- LEGEND - FIRE CABINET TANK SYSTEM
- 4 GALLON TANK.
 - PRIMARY ACTUATOR RELEASE.
 - SECONDARY ACTUATOR RELEASE.
 - PRESSURE SUPERVISION SWITCH.
 - PRIMARY HOSE ASSEMBLY.
 - SECONDARY HOSE ASSEMBLY.
 - REMOTE MANUAL ACTUATION DEVICE.

INCLUDES: FIELD INSTALLATION AND HOOKUP DURING NORMAL BUSINESS HOURS BY CERTIFIED INSTALLERS ONLY IN THE LOCATION NOTED ABOVE. TWO SITE VISITS ONLY (ONE VISIT TO SET PULL STATION & SYSTEM HOOKUP AND ONE VISIT FOR ONE TEST); ADDITIONAL VISITS WILL RESULT IN ADDITIONAL CHARGES. ONE MECHANICAL OR ELECTRICAL GAS VALVE PER SYSTEM AT A MAXIMUM SIZE OF 2". PERMIT AND SYSTEM TEST. EXCLUDES: UNION LABOR & PREVAILING WAGE (LABOR & WAGES WILL BE ADDED IF APPLICABLE), GAS VALVE INSTALLATION, ELECTRICAL HOOKUP AND CONNECTIONS, HANGING OF FIRE CABINET, SHUNT TRIP, HANDHELD EXTINGUISHER(S), ON-SITE RE-PIPING DUE TO EQUIPMENT LAYOUT CHANGES.

| REVISIONS | |
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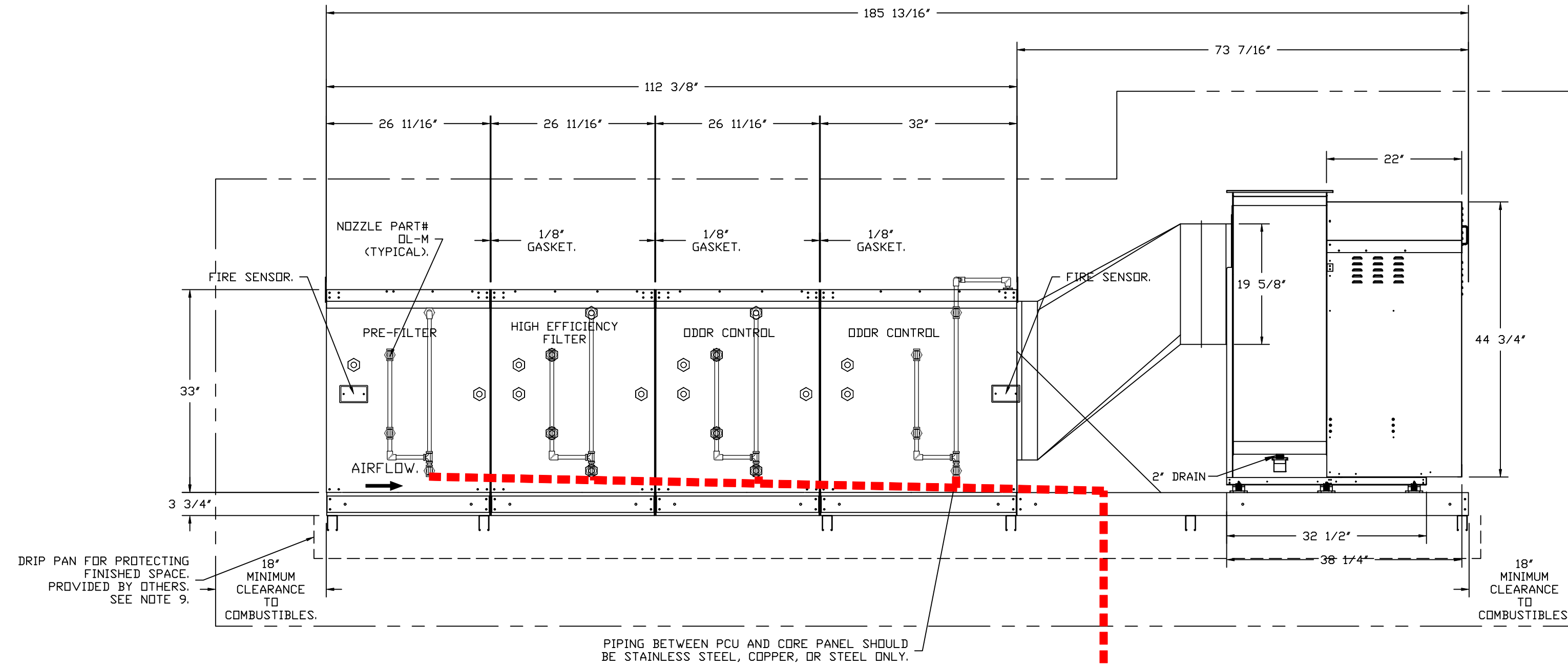
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MASTER DRAWING

SHEET NO. 3

POLLUTION CONTROL UNIT FIRE SYSTEM

FAN #1 USB120DD-RM - EXHAUST FAN (EF-1) - POLLUTION CONTROL UNIT WITH CORE PROTECTION FIRE SYSTEM INSTALLED. INCLUDES STEEL PRE FILTER MODULE, HIGH EFFICIENCY MERV 15 FILTER MODULE, AND DUAL ODOR CONTROL MODULES PREPPED WITH 20 DL-M NOZZLES AND INCLUDES DOWNSTREAM PROTECTION. ELECTRIC FIRE DETECTOR AND NOZZLES ARE INCLUDED.



--- FIELD PIPING.

PIPING BETWEEN PCU AND CORE PANEL SHOULD BE STAINLESS STEEL, COPPER, OR STEEL ONLY.

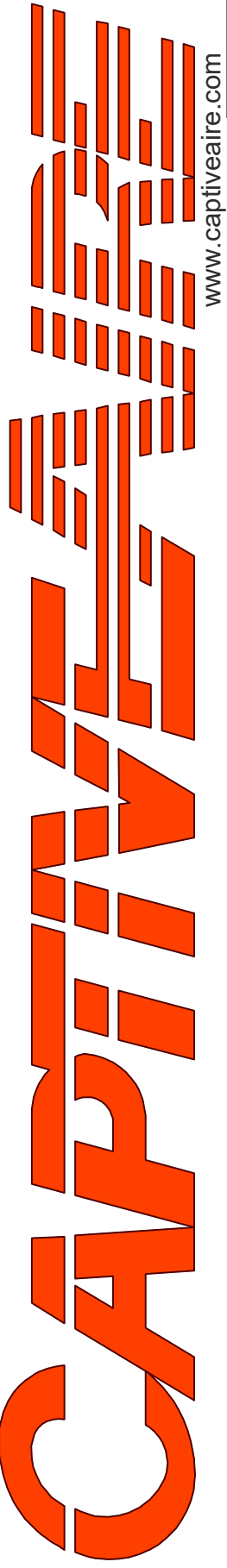
CORE PRESSURE LOSS:
WALL MOUNT PANEL TO PCU 2.
1' FIELD PIPING.
1.44 PSI LOSS.
27 GPM.

| PCU CORE WATER FLOW SUMMARY | | | |
|--|---------------|-------------------------|---------------------|
| | PIPE DIAMETER | MINIMUM FLDW RATE (GPM) | PRESSURE DRDP (PSI) |
| Field Piping Wall Mount Panel to PCU 2 | 1 | 27 | 1.44 |
| PCU Internal Piping | 0.375 | 27 | 20 |

| TOTAL SYSTEM INLET REQUIREMENTS | | |
|---------------------------------|-------------------------|------------------------|
| | MINIMUM FLDW RATE (GPM) | MINIMUM PRESSURE (PSI) |
| TOTAL CORE INLET REQUIREMENTS | 27 | 21.44 |

* OPERATING PRESSURE RANGE AT CORE PANEL GAUGE IS 21.44 TO 70 PSI.
MAXIMUM STATIC PRESSURE IS 125 PSI.

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 DRAWN BY: JMB-40
 SCALE: 3/4" = 1'-0"
 MASTER DRAWING

SHEET NO.
4

EXHAUST FAN INFORMATION - JOB#7115877

| FAN UNIT NO | TAG | QTY | FAN UNIT MODEL # | MANUFACTURER | CFM | ESP | RPM | MOTOR ENCL | HP | BHP | PHASE | VOLT | FLA | DISCHARGE VELOCITY | WEIGHT (LBS) | SONES |
|-------------|------|-----|------------------|--------------|------|-------|------|----------------|-------|--------|-------|------|------|--------------------|--------------|-------|
| 1 | EF-1 | 1 | USB120DD-RM | CAPTIVEAIRE | 1900 | 2.200 | 1400 | DDP,PREMIUM | 5.000 | 2.1380 | 3 | 208 | 15.0 | 828 FPM | 1416 | 31.4 |
| 2 | EF-2 | 1 | DFA-200-CA | CAPTIVEAIRE | 150 | 0.500 | 1724 | GENERALPURPOSE | 0.280 | 0.0880 | 1 | 115 | 1.7 | | 12 | N/A |
| 3 | EF-3 | 1 | DFA-150-CA | CAPTIVEAIRE | 100 | 0.500 | 2083 | GENERALPURPOSE | 0.150 | 0.0570 | 1 | 115 | 1.0 | | 9 | N/A |

FAN OPTIONS

| FAN UNIT NO | TAG | QTY | DESCRIPTION | | |
|-------------|------|-----|--|---|---|
| 1 | EF-1 | 1 | UTILITY SET GREASE CUP | | |
| | | 1 | BI - DISCHARGE ORIENTATION VERTICAL UPPER LEFT - CW INLET SIDE | | |
| | | 1 | BI20 - INLET CONNECTION STANDARD 20" FLANGED GREASE DUCT | | |
| | | 1 | POLLUTION CONTROL UNIT WITH PREFILTER, HIGH EFFICIENCY, AND DUAL ODDR CONTROL WITH INSTALLED ELECTRICAL DETECTION SYSTEM. SIZE 2 | | |
| | | 1 | PCU-SIZE 2 USB1-20 DD | | |
| | | 1 | BLUE RUBBER VIBRATION ISOLATORS FOR BI UTILITY SETS (SET OF 6) | | |
| | | 1 | BI20 - 20" DISCHARGE ADAPTER | | |
| | | 1 | 2 YEAR PARTS WARRANTY | | |
| | | 2 | EF-2 | 1 | FAN CONTROL - 3 AMP WHITE SPEED CONTROL FOR CFA CEILING FAN |
| | | | | 1 | 2 YEAR PARTS WARRANTY |
| 3 | EF-3 | 1 | FAN CONTROL - 3 AMP WHITE SPEED CONTROL FOR CFA CEILING FAN | | |
| | | 1 | 2 YEAR PARTS WARRANTY | | |

FAN ACCESSORIES

| FAN UNIT NO | TAG | EXHAUST | | | | SUPPLY | | | |
|-------------|------|------------|----------------|------------|----------------|----------------|------------------|------------|--|
| | | GREASE CUP | GRAVITY DAMPER | WALL MOUNT | SIDE DISCHARGE | GRAVITY DAMPER | MOTORIZED DAMPER | WALL MOUNT | |
| 1 | EF-1 | YES | | | | | | | |
| 2 | EF-2 | | | | | | | | |
| 3 | EF-3 | | | | | | | | |

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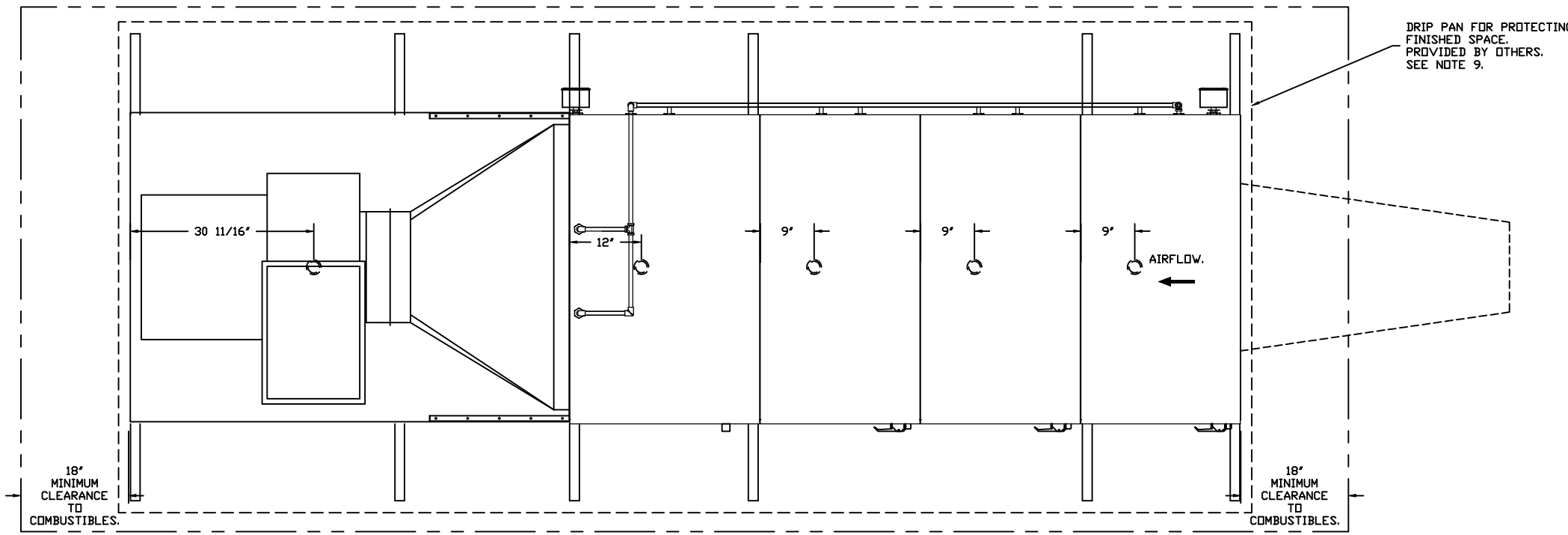
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SHEET NO.

5

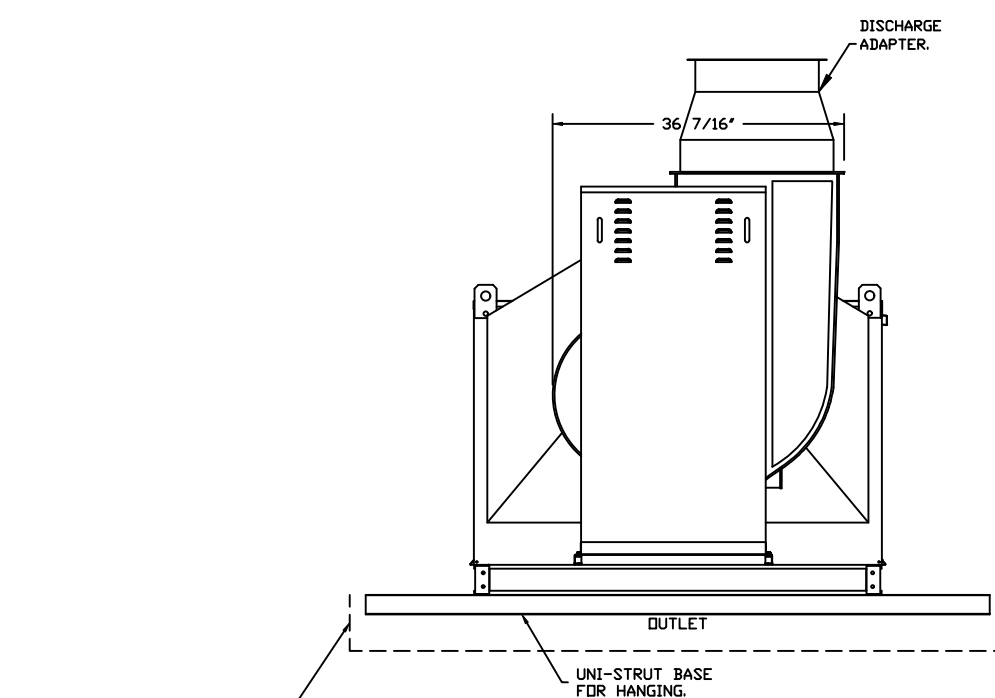
DESCRIPTION
 FAN #1 USB2000-RM - EXHAUST FAN (EF-1) - POLLUTION CONTROL UNIT WITH CORE PROTECTION FIRE SYSTEM INSTALLED, INCLUDES STEEL PRE-FILTER MODULE, HIGH EFFICIENCY MERV 15 FILTER MODULE, AND DUAL ODOR CONTROL MODULES PREPARED WITH 20 OZ. M NOZZLES AND INCLUDES DOWNSTREAM PROTECTION, ELECTRIC FIRE DETECTOR AND NOZZLES ARE INCLUDED.



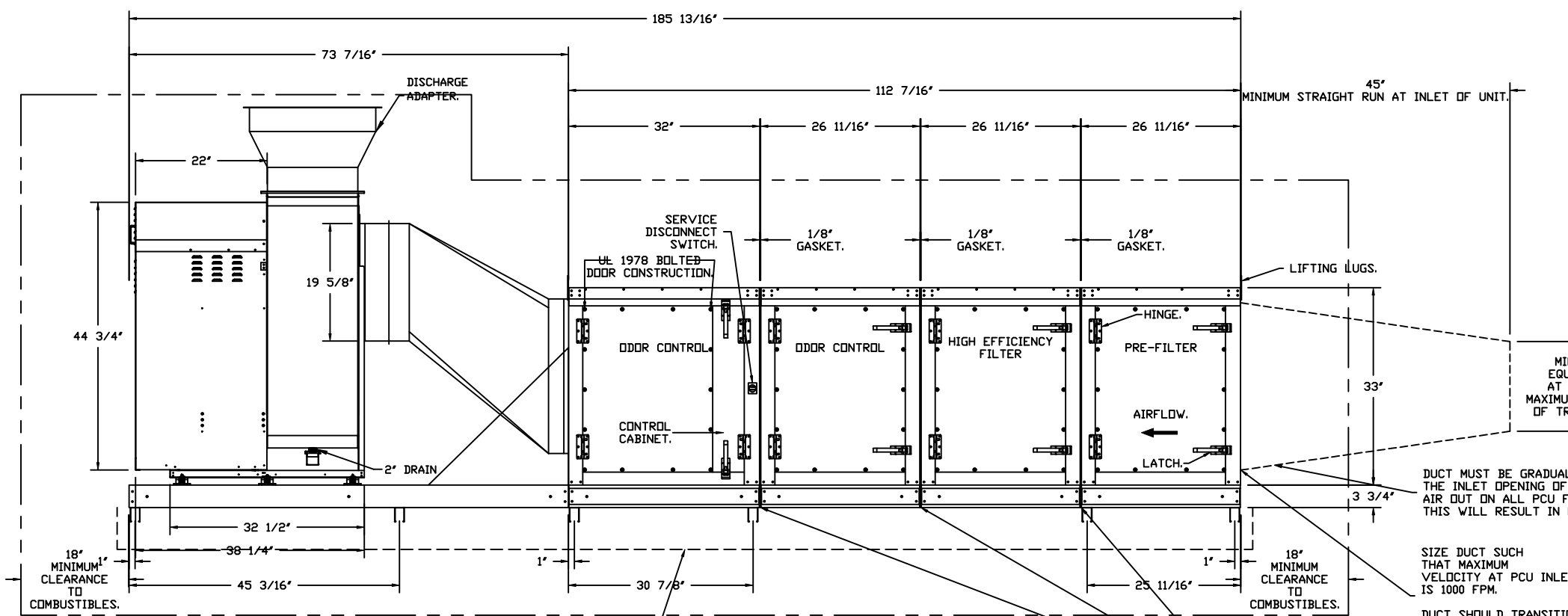
DRIP PAN FOR PROTECTING FINISHED SPACE PROVIDED BY OTHERS. SEE NOTE 9.

18\"/>

18\"/>



DRIP PAN FOR PROTECTING FINISHED SPACE PROVIDED BY OTHERS. SEE NOTE 9.



MINIMUM DIAMETER OF 15\"/>

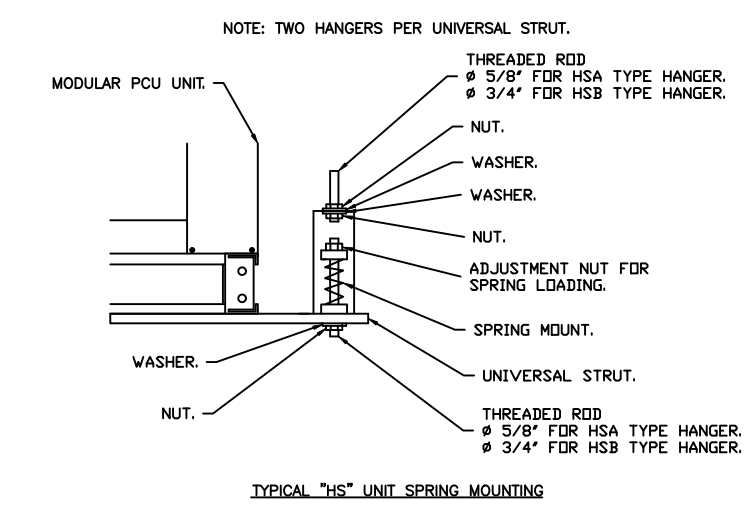
DUCT MUST BE GRADUALLY TRANSITIONED TO THE INLET OPENING OF THE PCU TO SPREAD AIR OUT ON ALL PCU FILTERS. FAILURE TO DO THIS WILL RESULT IN ODDOR AND SMOKE BYPASS.

SIZE DUCT SUCH THAT MAXIMUM VELOCITY AT PCU INLET IS 1000 FPM.
 DUCT SHOULD TRANSITION TO 27 3/8\"/>

UNIT IS SEPARATED AT THESE LOCATIONS FOR EASE OF SHIPPING AND INSTALLATION. ASSEMBLY AT THESE LOCATIONS IS REQUIRED IN THE FIELD.

- NOTES:
- ALL DIMENSIONS ARE NOMINAL AND GIVEN IN INCHES.
 - C/AIS UL710 LISTED FOR GREASE DUCT INSTALLATION.
 - DIRECT DRIVE EXHAUST ONLY UNIT WITH 20750' UTILITY SET EXHAUST FAN W/ 2\"/>

FAN #1 USB2000-RM - EXHAUST FAN (EF-1) - POLL #2 PCU-PF-HC-DC-DC-CPFS-2
 FAN WEIGHT = 1416LBS
 PCU LOCATION INDOOR (CONDITIONED SPACE).



- PCU OPTIONS:
- INDOOR HANGING CRADLE FOR SIZE 2 PCU WITH 3 OR 4 MODULES AND USB1 BLOWER. 6 PIECES OF UNI-STRUT, 78 INCHES LONG EACH. 2 HSAR00 HANGING ISOLATORS PER UNI-STRUT INCLUDED. FOR USE WITH USB1 BLOWERS.
 - POWER WITH IHC SCREEN, BACK PLATE WITH LABEL, AIRLINE/7\"/>

- INLET NOTES:
- LENGTH OF STRAIGHT DUCT ON INLET OF PCU TO BE 3 TIMES THE EQUIVALENT DUCT DIAMETER TO AVOID SYSTEM EFFECT.
 - MAX INLET DUCT VELOCITY TO BE 1000 FPM INTO THE PCU. DUCTWORK SHOULD BE SIZED APPROPRIATELY.
 - DUCT MUST BE GRADUALLY TRANSITIONED TO THE INLET OPENING OF THE PCU TO SPREAD AIR OUT ON ALL PCU FILTERS. FAILURE TO DO THIS WILL RESULT IN ODDOR AND SMOKE BYPASS.

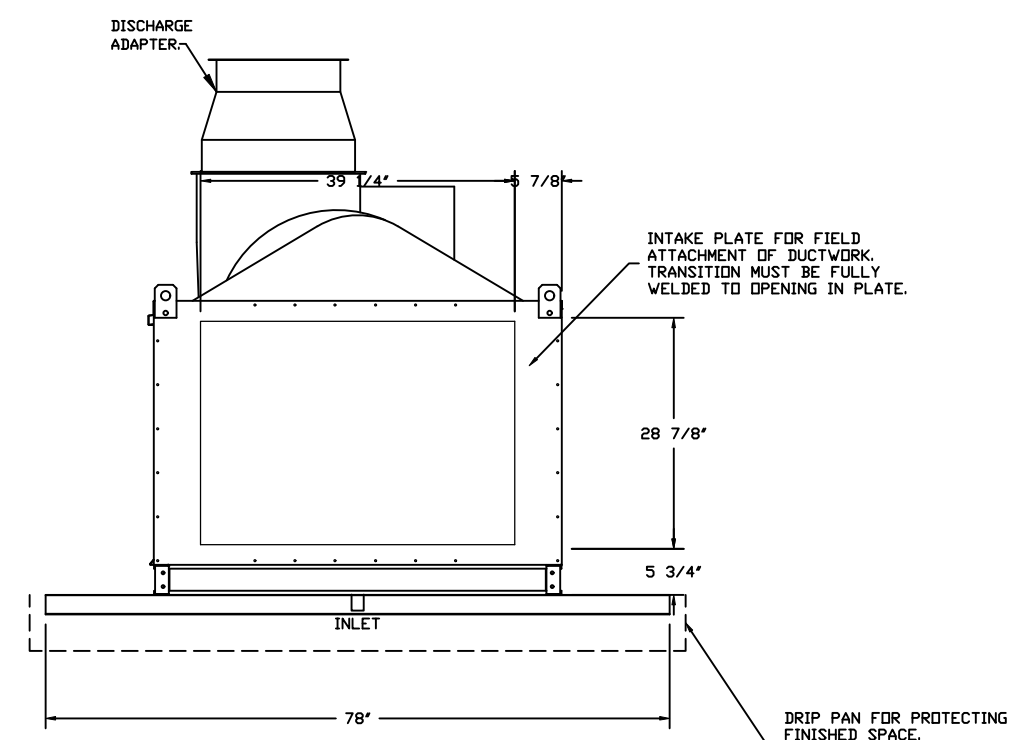
- A SERVICE PLATFORM MUST BE INSTALLED ON THE FILTER SIDE OF THE UNIT FOR PROPER FILTER MAINTENANCE.
- THE PLATFORM MUST BE THE SAME LENGTH AS THE PCU AND AT LEAST 3 FEET WIDE.
- THE PLATFORM MUST BE STRUCTURALLY SUPPORTED BY THE BUILDING, INDEPENDENT OF THE PCU.
- THE PLATFORM MUST BE DESIGNED TO PROPERLY SUPPORT THE WEIGHT OF ALL PCU FILTERS AND MAINTENANCE PERSONNEL.
- HANDRAILS MUST BE INSTALLED ON THE SERVICE PLATFORM TO PROTECT MAINTENANCE PERSONNEL.

- FAN OPTIONS:
- UTILITY SET GREASE CUP
 - BI - DISCHARGE ORIENTATION
 - VERTICAL, UPPER LEFT - CW INLET SIDE
 - RIBO - INLET CONNECTION STANDARD
 - 20\"/>

| PCU FILTER SPECIFICATIONS | | | | | |
|---------------------------|------------------------|-------------------|-----|---------|--------------------|
| DESIGN CFM - 1900 | | | | | |
| MODULE | FILTER TYPE | FILTER EFFICIENCY | QTY | SIZE | SP(CLEANS) (in WC) |
| 1 | CAPTRATE SLDL | MERV 8 | 6 | 20X25X2 | 0.117 |
| 2 | HIGH EFFICIENCY | MERV 15 | 6 | 20X25X4 | 0.111 |
| 3 | DC CAUSTIC IMPREGNATED | N/A | 6 | 20X25X4 | 0.354 |
| 4 | DC 100% CARBON | N/A | 6 | 20X25X4 | 0.354 |
| | | | | | 0.936 |



PLEASE REFER TO ADDITIONAL INLET NOTES 1-3

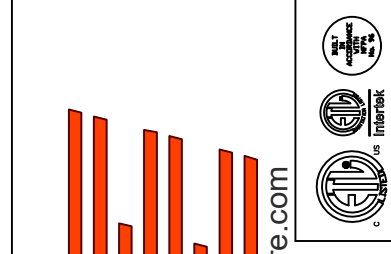


INTAKE PLATE FOR FIELD ATTACHMENT OF DUCTWORK. TRANSITION MUST BE FULLY WELDED TO OPENING IN PLATE.

DRIP PAN FOR PROTECTING FINISHED SPACE PROVIDED BY OTHERS. SEE NOTE 9.

REVISIONS

| DESCRIPTION | DATE: |
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CHIPOTLE EMPIRE BLVD BROOKLYN NY_R2
 1750 Bedford Avenue,
 Brooklyn, NY, 11225

DATE: 11/6/2024

DWG.#:
7115877

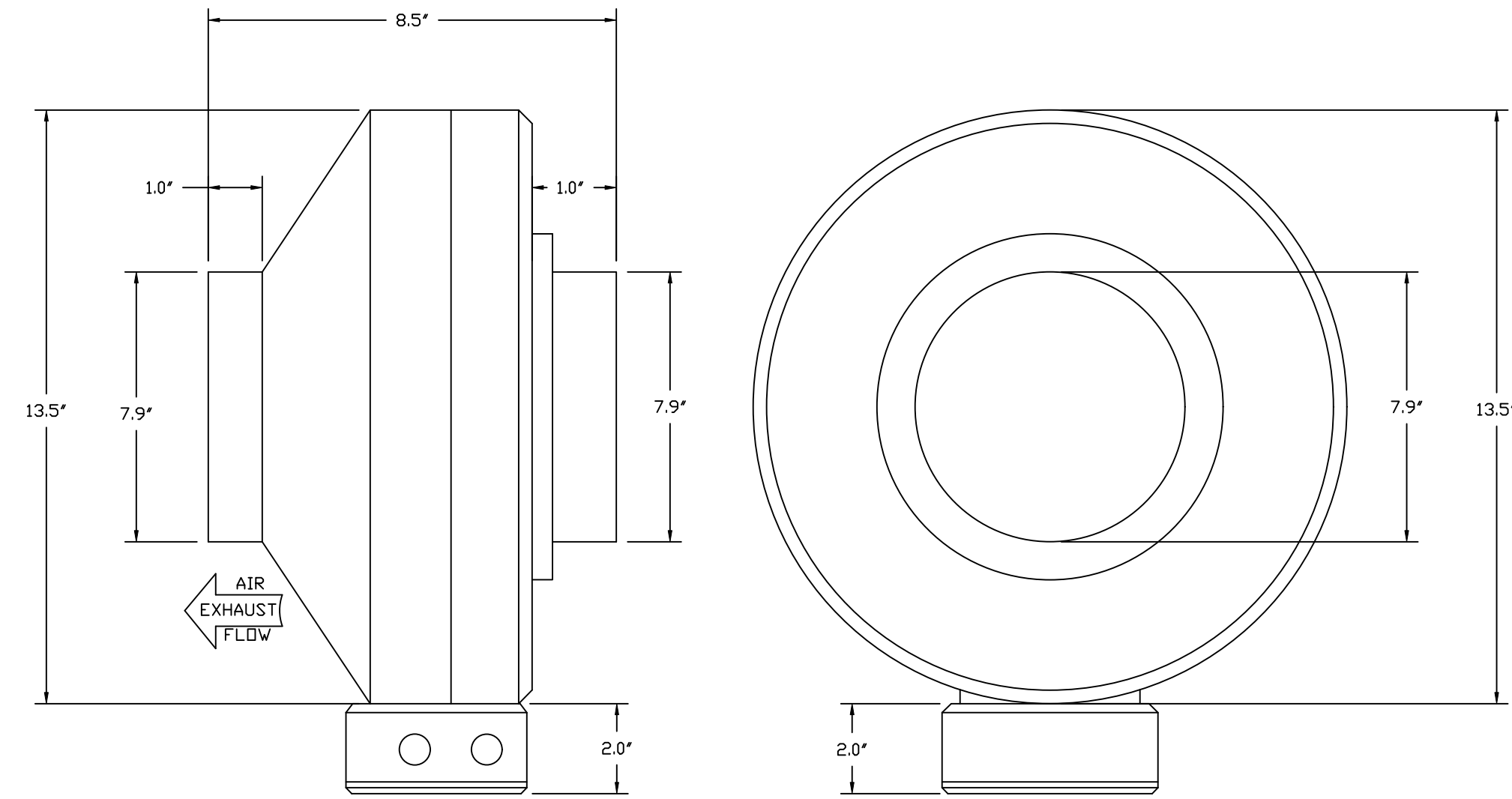
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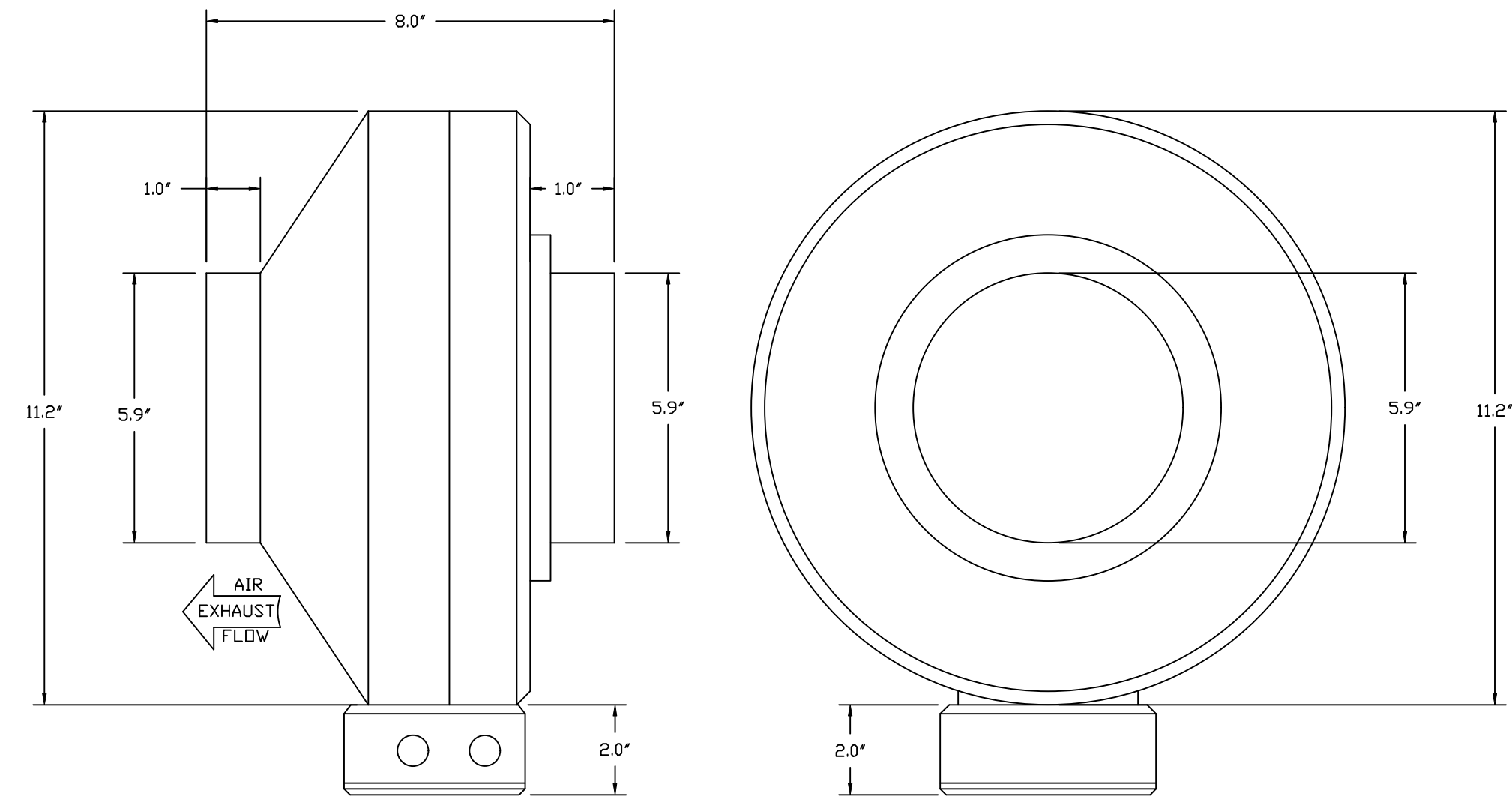
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SHEET NO.
6

FAN #2_DFA-200-CA - EXHAUST FAN (CF-2)



FAN #3_DFA-150-CA - EXHAUST FAN (CF-3)



FEATURES:

- 20 GA. GALVANIZED STEEL HOUSING.
- STANDARD 4" - 12" ROUND DUCT CONNECTIONS.
- EASILY ACCESSIBLE J-BOX.
- UL507 LISTED.
- EXTREMELY QUIET OPERATION.

OPTIONS:

- FAN CONTROL - 3 AMP WHITE SPEED CONTROL FOR CFA CEILING FAN.
- 2 YEAR PARTS WARRANTY.

FEATURES:

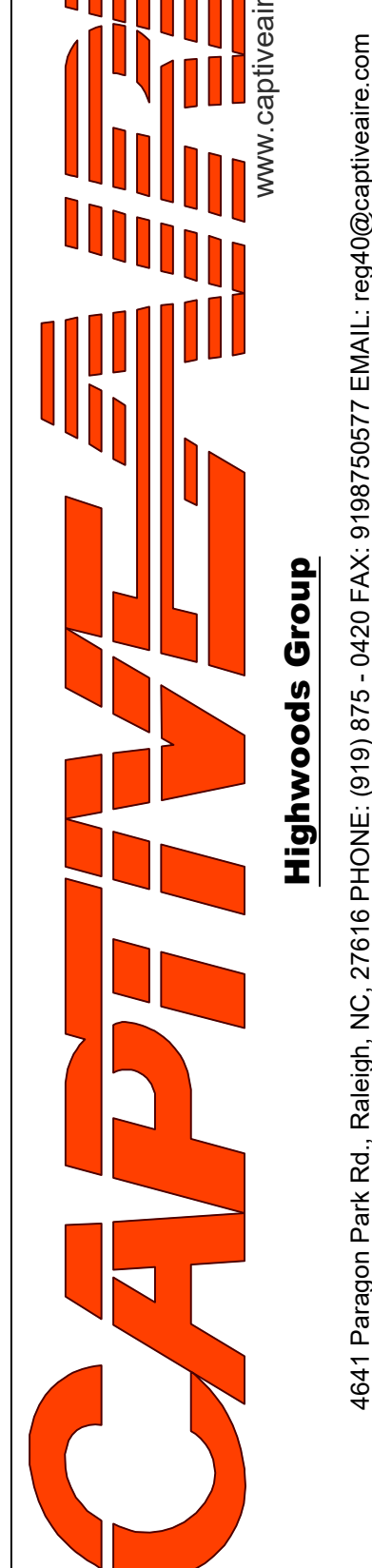
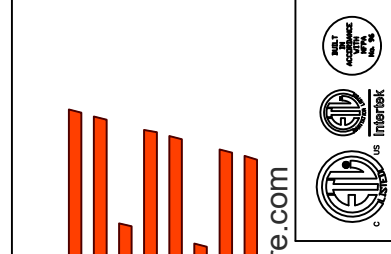
- 20 GA. GALVANIZED STEEL HOUSING.
- STANDARD 4" - 12" ROUND DUCT CONNECTIONS.
- EASILY ACCESSIBLE J-BOX.
- UL507 LISTED.
- EXTREMELY QUIET OPERATION.

OPTIONS:

- FAN CONTROL - 3 AMP WHITE SPEED CONTROL FOR CFA CEILING FAN.
- 2 YEAR PARTS WARRANTY.

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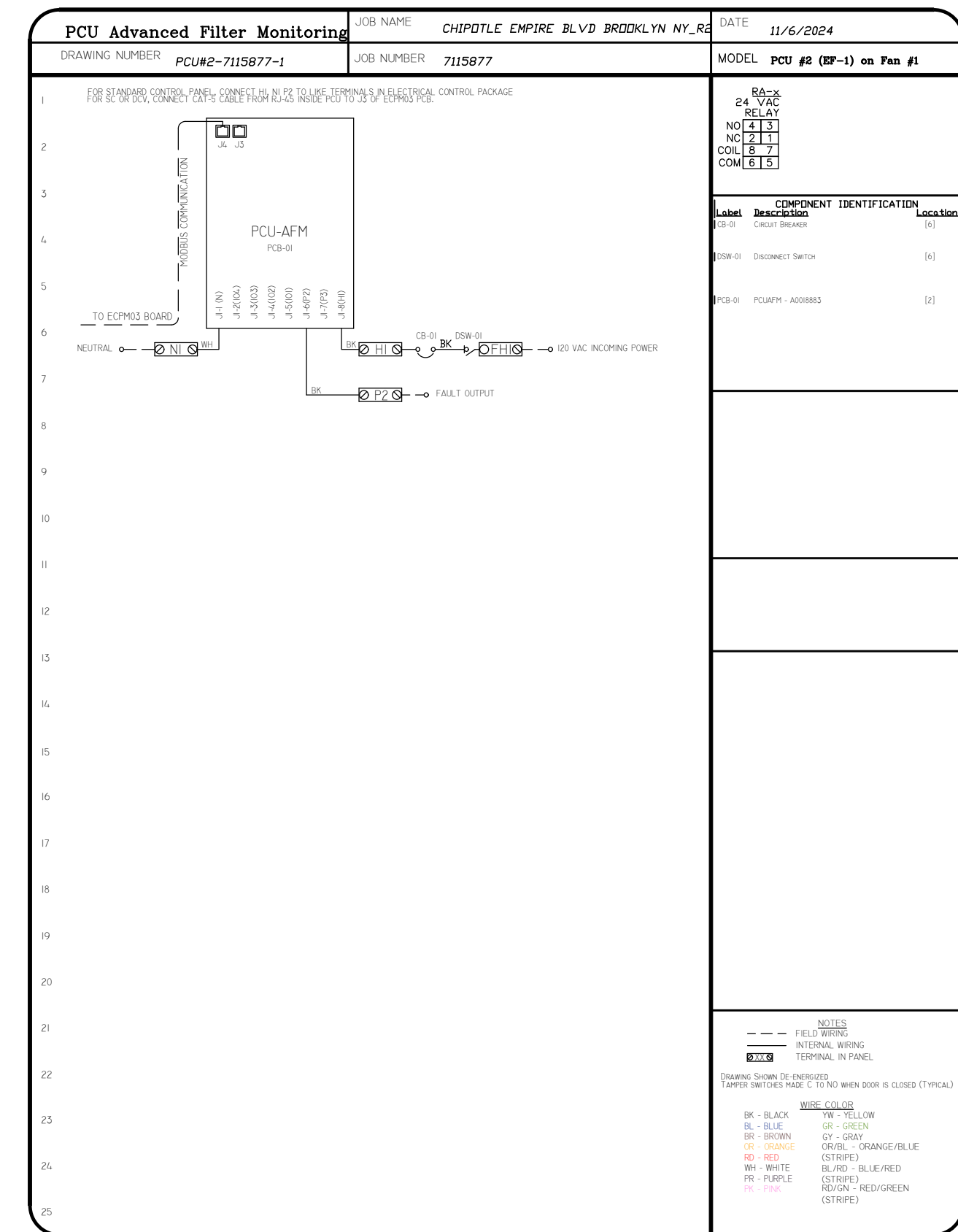
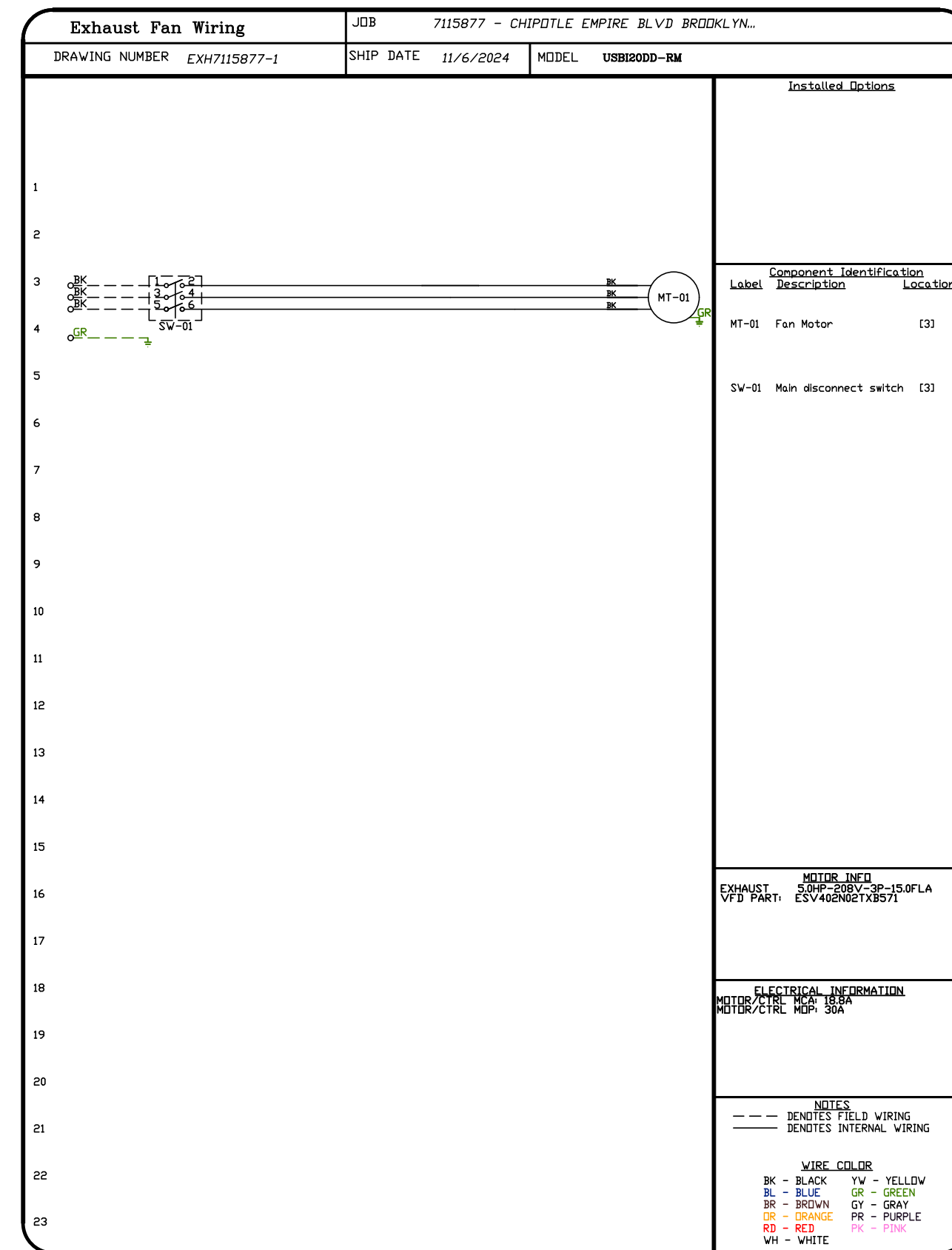
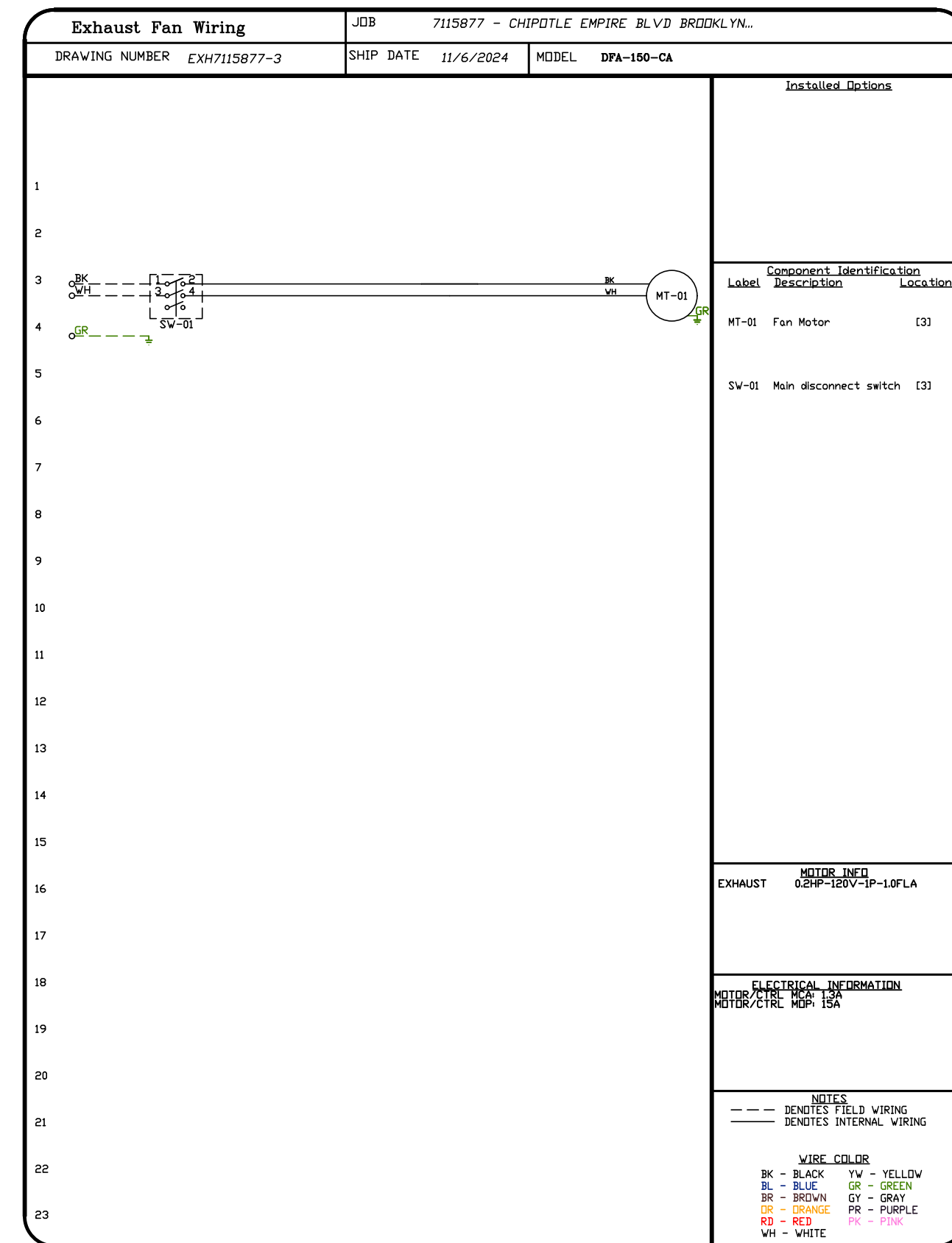
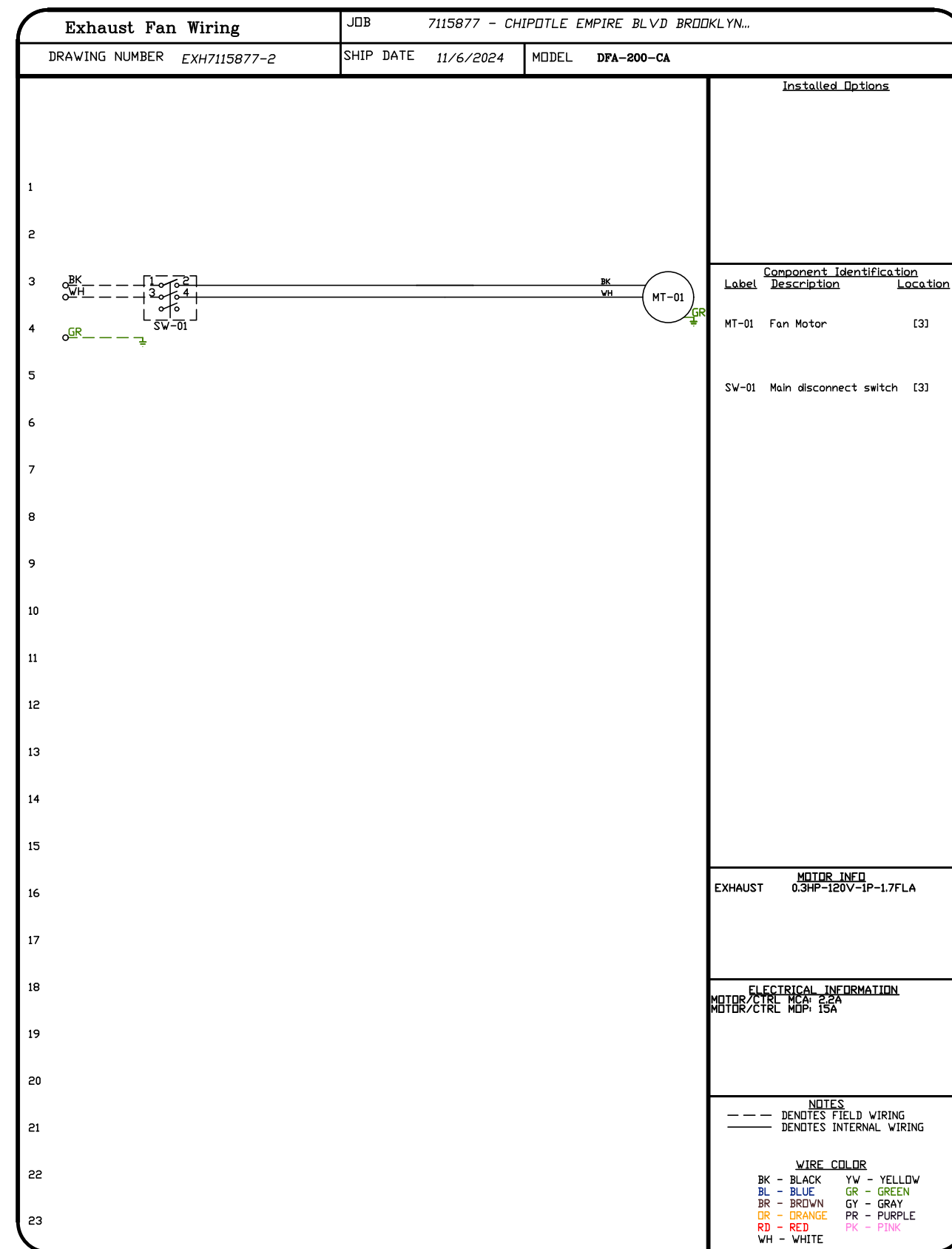
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3/4" = 1'-0"

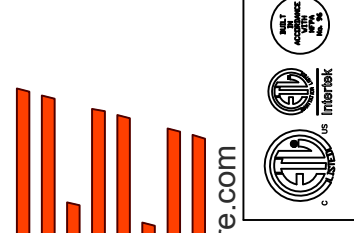
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7

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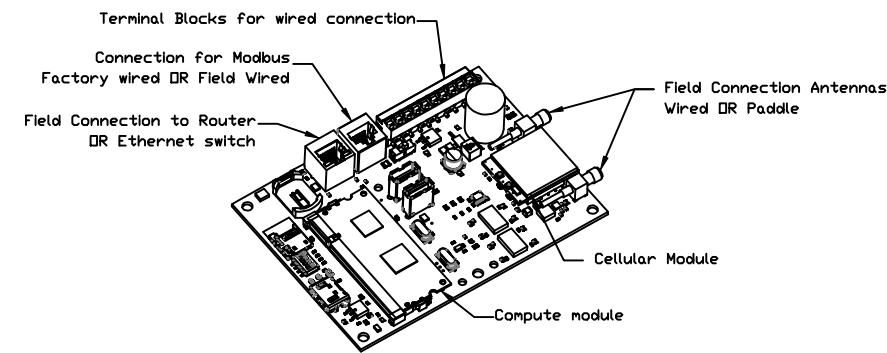
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SCALE: 3/4" = 1'-0"
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 8

ELECTRICAL PACKAGE - JOB#7115877

| NO | TAG | PACKAGE # | LOCATION | SWITCHES | | OPTION | FANS CONTROLLED | | | | | |
|----|-----|-------------|-----------------------|-----------------------------------|------------------|--|-----------------|---------|---|-------|------|------|
| | | | | LOCATION | QUANTITY | | FAN TAG | TYPE | # | HP | VOLT | FLA |
| 1 | | SC-310110MA | UTILITY CABINET RIGHT | UTILITY CABINET RIGHT HOOD # 1 | 1 LIGHT 1 FAN | SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY | EF-1 | EXHAUST | 3 | 5.000 | 208 | 15.0 |

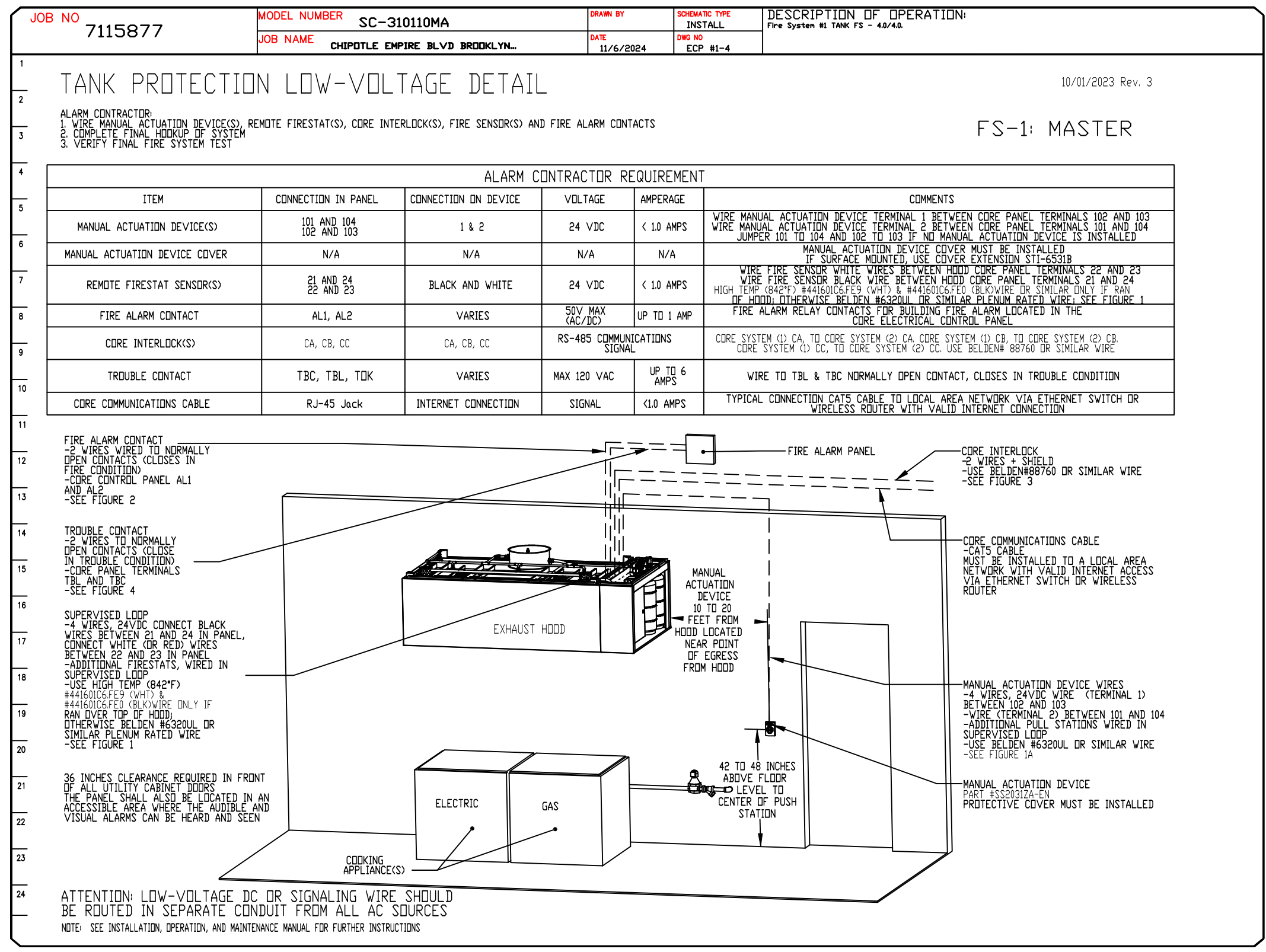
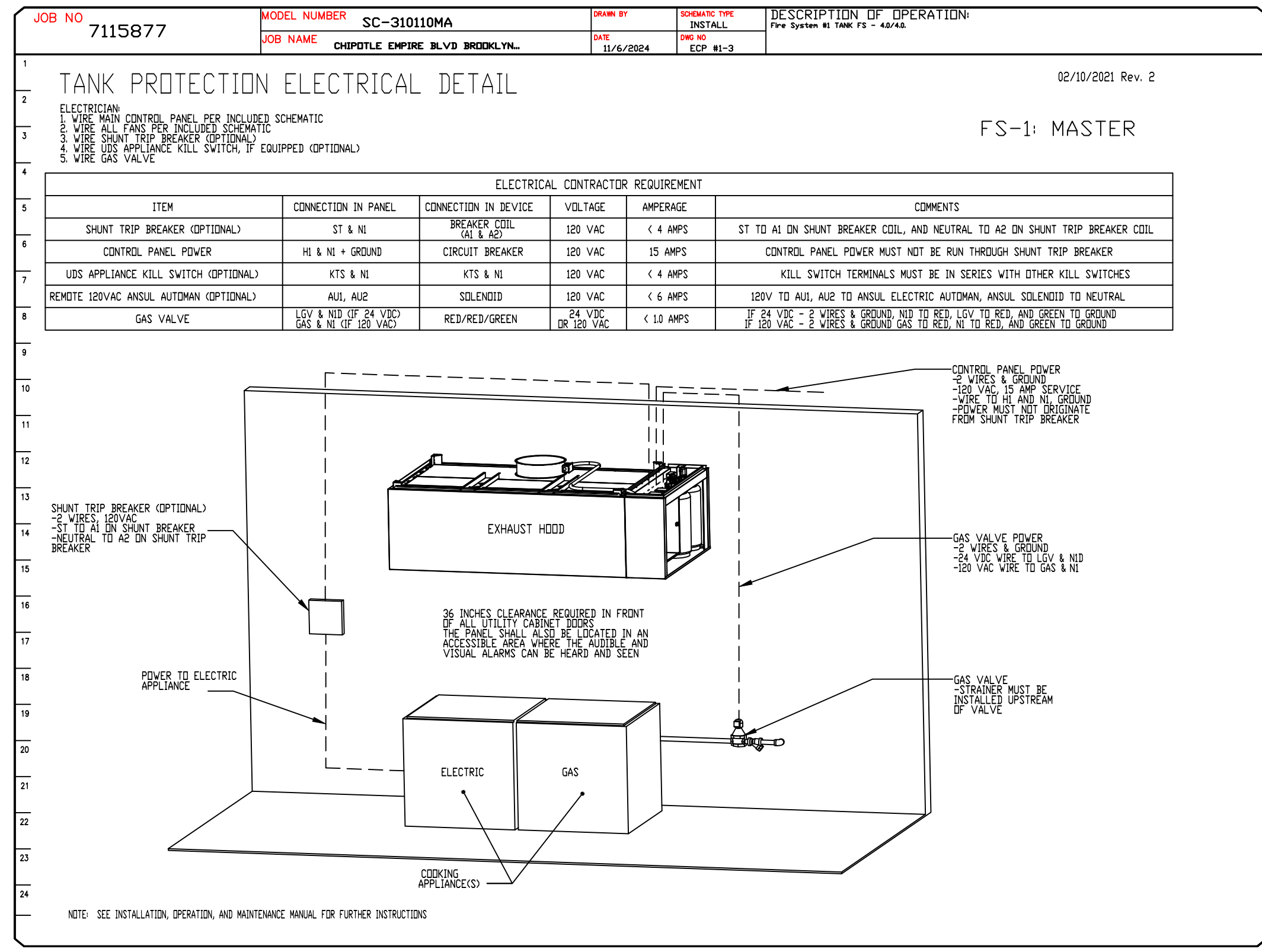
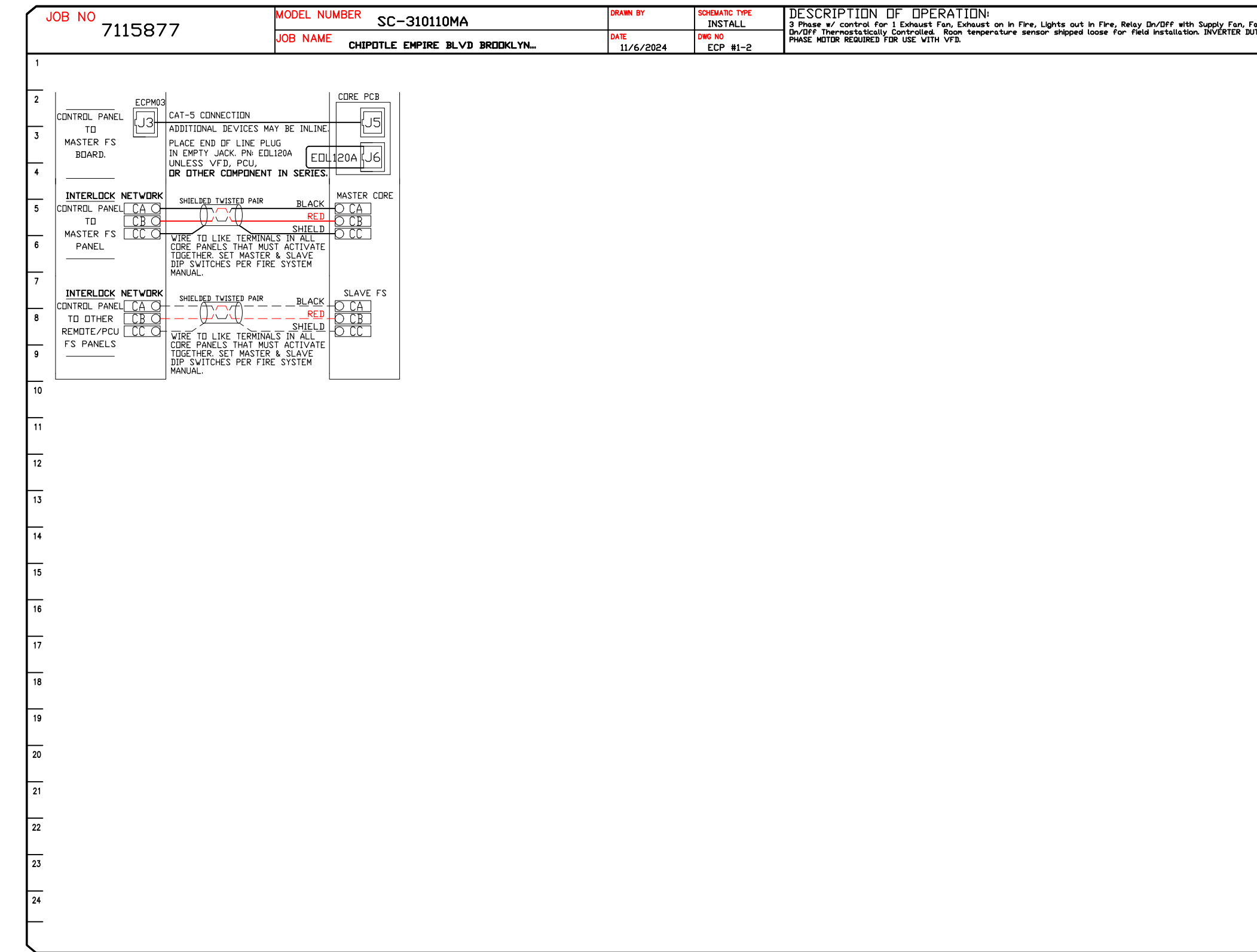
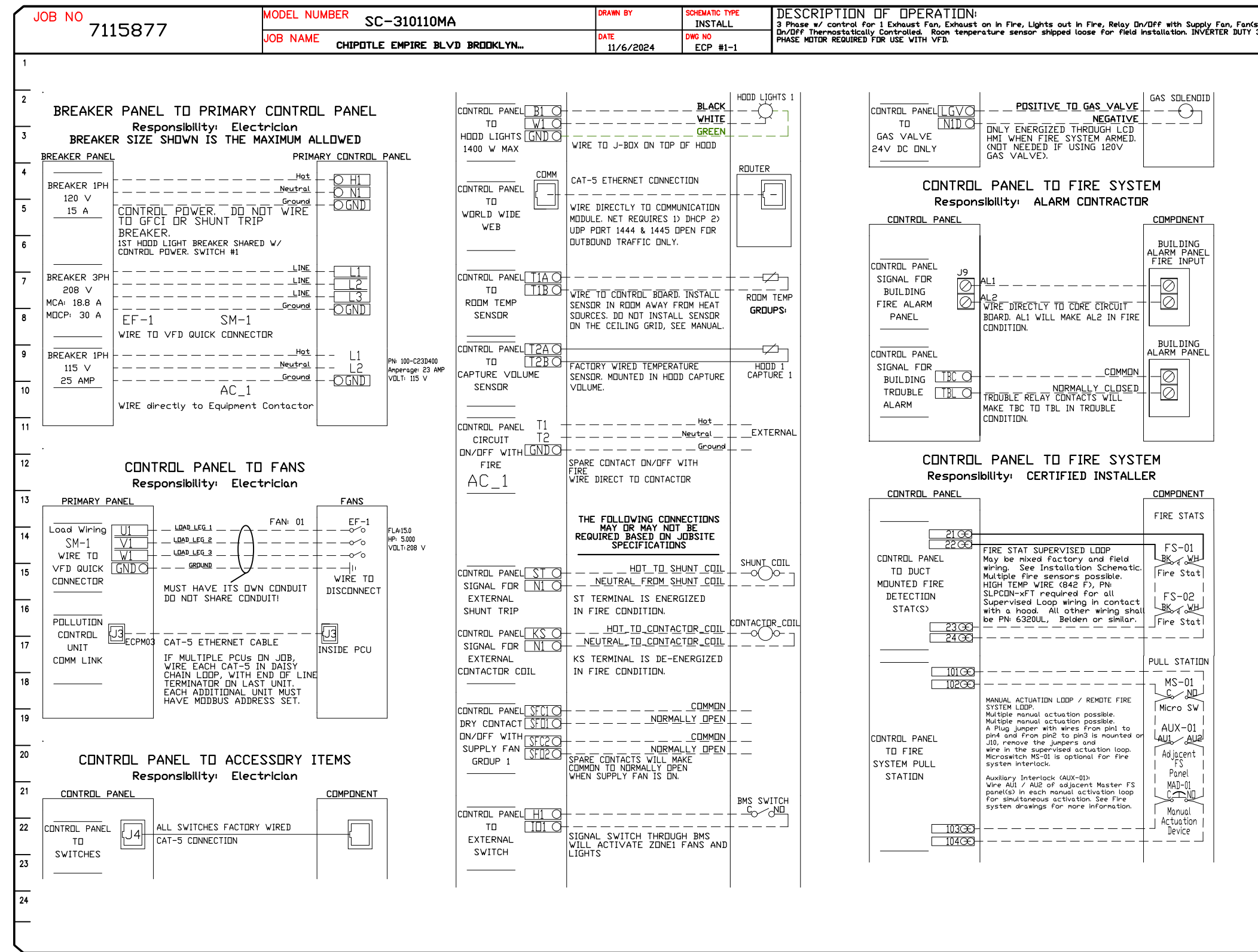


CASlink Monitor and Control

- Hood control panel to support communications to cloud-based Building Management System.
- Hood Control Panel to allow cloud-based Building Management System to monitor real time parameters outlined as MONITOR in the points list.
- Hood Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the points list.
- Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building Management.

MONITORING AND CONTROL POINTS LIST

| DCV Packages | Function | DC Packages | Function |
|-----------------------------------|-------------------|-----------------------------------|-------------------|
| Room Temperature | MONITOR | Room Temperature(s) | MONITOR |
| Duct Temperature(s) | MONITOR | Duct Temperature(s) | MONITOR |
| MHA Discharge Temperature | MONITOR | MHA Discharge Temperature | MONITOR |
| Kitchen RTU Discharge Temperature | MONITOR | Kitchen RTU Discharge Temperature | MONITOR |
| Fan Speed | MONITOR | Controller Fan(s) | MONITOR |
| Fan Amperage | MONITOR | Fan Status | MONITOR |
| VFD Faults | MONITOR | PCU Filter Clog Percentages | MONITOR |
| Controller Fan(s) | MONITOR | Flow Condition | MONITOR |
| Fan Status | MONITOR | CO2 Fire System | MONITOR |
| Building Pressures | MONITOR | Building Pressures | MONITOR |
| PCU Filter Clog Percentages | MONITOR | Fans Button(s) | MONITOR & CONTROL |
| Fire Condition | MONITOR | Light(s) Button(s) | MONITOR & CONTROL |
| CO2 Fire System | MONITOR | Wash Button | MONITOR & CONTROL |
| Building Pressures | MONITOR | | |
| Prep Time Button | MONITOR & CONTROL | | |
| Fans Button | MONITOR & CONTROL | | |
| Light(s) Button | MONITOR & CONTROL | | |
| Wash Button | MONITOR & CONTROL | | |



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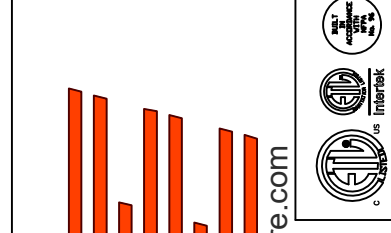
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SCALE:
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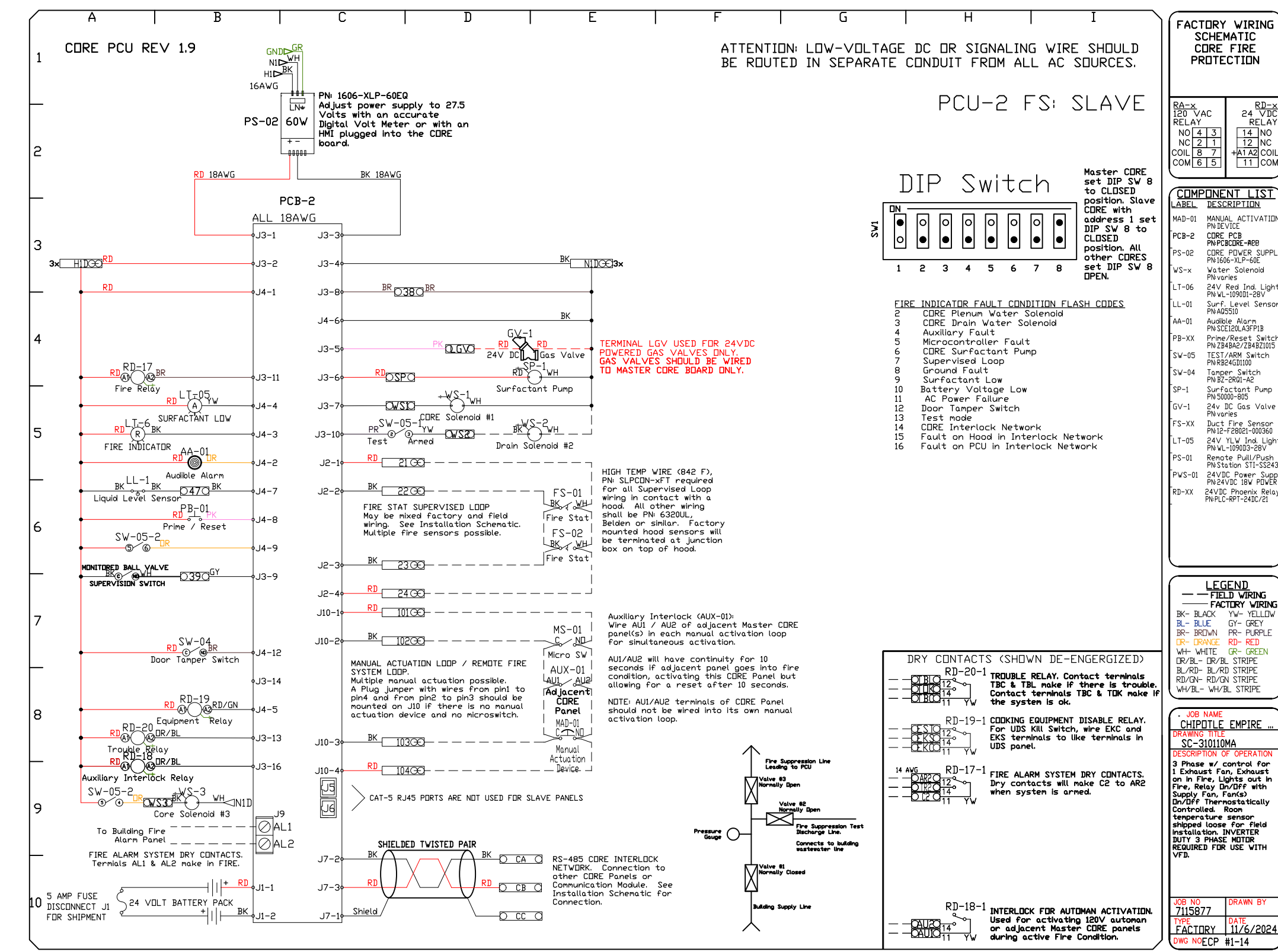
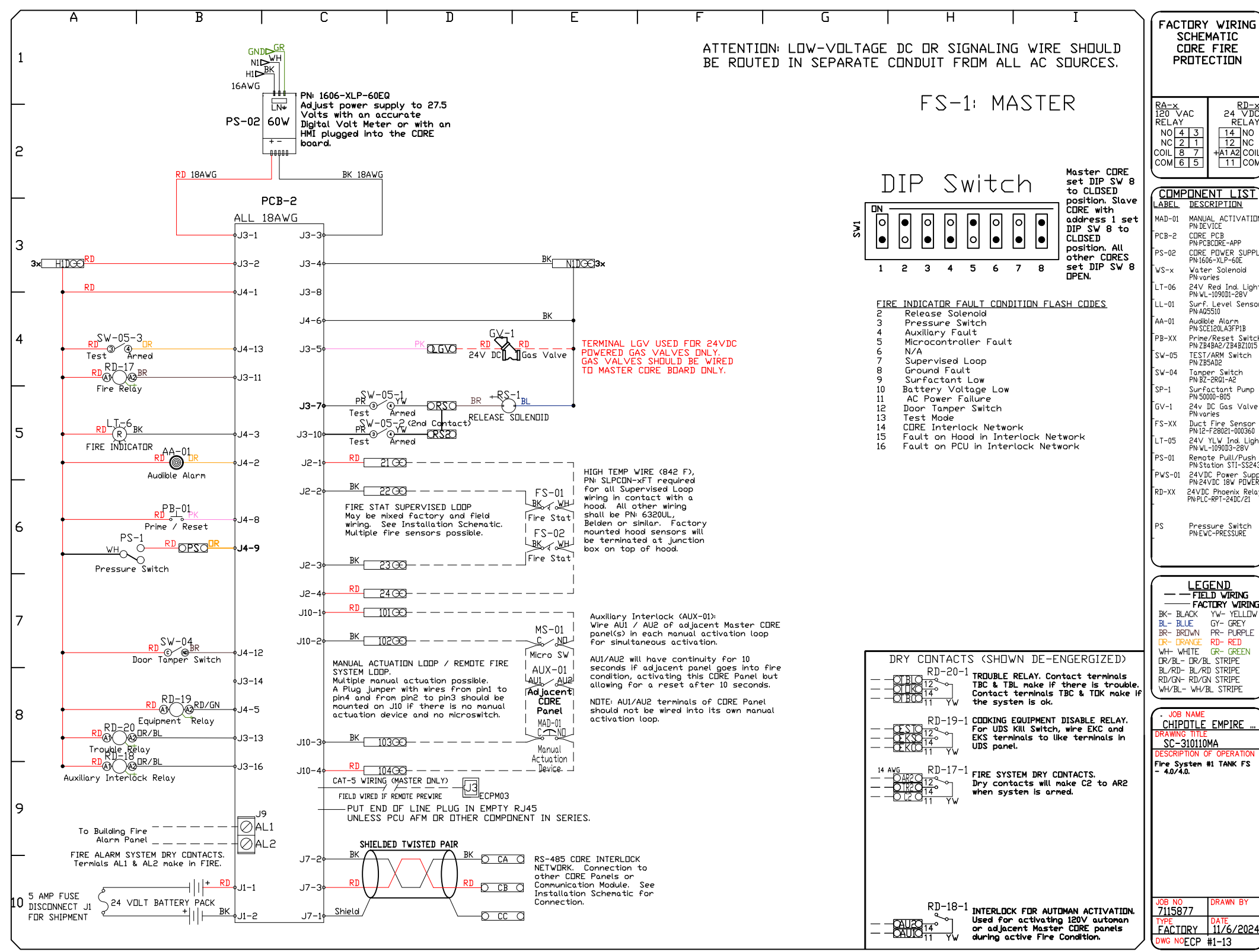
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SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

| BUILDING CODE DATA | | |
|---|--|---------|
| | CODE | |
| GENERAL | NEW YORK CITY BUILDING CODE | 2022 |
| HVAC/MECHANICAL | NEW YORK CITY MECHANICAL CODE | 2022 |
| PLUMBING | NEW YORK CITY PLUMBING CODE | 2022 |
| ELECTRICAL | NEW YORK CITY ELECTRIC CODE | 2022 |
| FIRE PROTECTION | NEW YORK CITY FIRE CODE | 2022 |
| | NFPA STANDARDS | CURRENT |
| FUEL | NEW YORK CITY FUEL GAS CODE | 2022 |
| ENERGY | NEW YORK CITY ENERGY CONSERVATION CODE | 2022 |
| LOCAL AMENDMENTS | N/A | N/A |
| NOTES: | | |
| A. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE LISTED CODES, LOCAL CODE AMENDMENTS, AND REFERENCED STANDARDS AS ENFORCED BY THE AUTHORITY HAVING JURISDICTION (AHJ). | | |
| B. ALL WORK SUBJECT TO INSPECTION BY THE AHJ AT THE PROJECT SITE FOR COMPLIANCE | | |

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF A RESTAURANT TENANT FINISH OF AN EXISTING BUILDING. THE NEW MECHANICAL WORK INCLUDES A NEW HEAT PUMP SYSTEM, PROVIDING THE HEATING, COOLING, MAKE-UP AIR, AND VENTILATION FOR THE SPACE, A NEW GREASE EXHAUST HOOD AND EXHAUST FAN AND A NEW EXHAUST FAN SERVING THE RESTROOMS.

LIST OF SPECIAL & PROGRESS INSPECTIONS

SPECIAL INSPECTIONS:

- DEMOLITION [BC 1705.25.5.1]
- FIRE RESISTANT PENETRATIONS AND JOINTS [BC 1705.17]
- MECHANICAL SYSTEMS [BC 1714.16]
- SPRINKLER SYSTEMS [BC 1704.23]
- TENANT PROTECTION PLAN COMPLIANCE [BC 1705.26]

PROGRESS INSPECTIONS:

- ENERGY CODE COMPLIANCE INSPECTIONS [BC 110.3.5]
 - VESTIBULES (IUA9)
 - HVAC-R AND SERVICE WATER HEATING EQUIPMENT (IB3)
 - HVAC-R AND SERVICE WATER HEATING SYSTEM CONTROLS (IB4)
 - HVAC-R AND SERVICE WATER PIPING DESIGN AND INSULATION (IB5)
 - DUCT LEAKAGE TESTING, INSULATION AND DESIGN (IB5)
 - INTERIOR LIGHTING POWER (IIC3)
 - LIGHTING CONTROLS (IIC5)
 - MAINTENANCE INFORMATION (IID1)
- FINAL [28-116.2.4.2, BC109.5 AND DIRECTIVE 14/1975 AND 1 RCNY]

SECTION 15732 - PACKAGED ROOFTOP AIR-CONDITIONING UNITS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- Submittals: Product Data and Shop Drawings.
- Comply with ASHRAE 15.
- EER: Equal to or greater than prescribed by the energy code adopted by the Authority Having Jurisdiction.
- Warranties: Submit a written warranty, signed by the manufacturer, agreeing to the repair or replacement of components that fail within 5 years of Substantial Completion.

PART 2 - PRODUCTS

2.1 PACKAGED UNITS, 5 TO 20 TONS

- Factory assembled and tested, consisting of compressors, condensers, evaporator coils, condenser and evaporator fans, refrigeration and temperature controls, filters, and dampers.
 - Refer to Rooftop Heating/Cooling Unit Schedule on drawing M600 for capacities, and manufacturers.
 - Evaporator Fans: Belt or direct driven, forward curved centrifugal.
 - Exhaust/Relief Fans: Direct drive, forward curved centrifugal or propeller.
 - Condenser Fans: Direct drive propeller.
 - Refrigerant Coils: Aluminum fins and copper coil.
 - Compressors: Serviceable hermetic or fully hermetic, with safety controls, hot gas bypass, and timed off controls.
 - Heat Exchangers: Gas fired, with gas controls, electronic ignition, high limit cutoff, and forced draft proving switch.
 - Economizer controls (Comparative Enthalpy, 100% capacity).
 - Smoke Detectors: Photoelectric in supply and/or return as called for in schedule on sheet M600.
 - Operating Controls: Two stage heating and two stage cooling on units 7-1/2 tons and over.
 - Roof curb.
 - Control Wiring from T-stat to rooftop unit: Shall be 18ga / 7 conductor, rated for plenum applications.
 - Control Wiring from T-stat to remote sensor: Shall be a separate 18ga / 2 conductor shielded, rated for plenum applications.

PART 3 - EXECUTION

3.1 INSTALLATION

- Install units level and plumb and firmly anchored.
- Connect gas piping to burner with pipe same size as gas train inlet, and provide union with sufficient clearance for burner removal and service.
- Install ducts to termination in roof mounting frames. Terminate ducts through roof structure.
- Connect units to wiring systems and to ground.

END OF SECTION 15732

SECTION 15810 - DUCTS AND ACCESSORIES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- Submittals: Product Data for fire and smoke dampers.
- Comply with NFPA 90A for systems serving spaces more than 25,000 cu. ft. in volume or building Types II, IV, and V construction more than 3 stories in height.
- Comply with NFPA 90B for systems serving spaces in 1 or 2 family dwellings or serving spaces less than 25,000 cu. ft..
- Comply with NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operations," for kitchen hood ducts.
- Comply with UL 181 and UL 181A for ducts and closures.
- Testing, Adjusting, and Balancing Agency Qualifications: AABC certified (to be furnished by Tenant).

PART 2 - PRODUCTS

2.1 DUCTS

- Spiral Duct: Spiral Lock Seam, without insulation, G90 galvanized finish, ASTM A-653/G92
 - Basis of Design Manufacturers: Lindab SPIROsafe, alternates to the basis of design must be submitted for review.
 - Fittings: Factory produced standing seam construction with internal sealing. Fittings with a major axis of 36" or smaller shall be 20 gauge. Fittings with a major axis of 37"-48" shall be 18 gauge.
- Galvanized Steel Sheet: Forming steel, ASTM A 653/653M, G90 coating designation.
- Duct Liner: ASTM C 1071, Type II, with an airstream surface coated with a temperature resistant coating.
 - Adhesive: ASTM C 916, Type I.
 - Mechanical Fasteners: Galvanized steel pin, length as required to penetrate liner plus a 1/8 inch projection maximum into the airstream.
- Joint and Seam Tape: Comply with UL 181A.
- Joint and Seam Sealant: Comply with UL 181A.
- Rectangular Metal Duct Fabrication: Comply with SMACNA's "HVAC Duct Construction Standard" for metal thickness, reinforcing types and intervals, tie rod applications, and joint types and intervals.

2.2 ACCESSORIES

- Volume-Control Dampers: Factory fabricated volume control dampers, complete with required hardware and accessories. Single blade and multiple opposed blade, standard leakage rating, and suitable for horizontal or vertical applications.
- Fire Dampers: Factory-fabricated fire dampers, complete with required hardware and accessories. UL labeled according to UL 555, "Fire Dampers".
- Flexible Connectors: Flame retardant or noncombustible fabrics, coatings, and adhesives complying with UL 181, Class 1.
- Flexible Ducts: Factory fabricated, insulated, round duct, with an outer jacket enclosing 2 inch thick, glass fiber insulation, R-value: 6.0, around a continuous inner liner.

PART 3 - EXECUTION

3.1 INSTALLATION

- Duct System Pressure Class: Construct and install each duct system with 2 inch positive and negative duct pressure classifications.
- Conceal ducts from view in finished and occupied spaces. Except where noted as exposed.
- Avoid passing through electrical equipment spaces and enclosures.
- Support and connect metal ducts according to SMACNA's "HVAC Duct Construction Standard".
- Install duct accessories according to applicable portions of details of construction as shown in SMACNA standards.
- Install liner and/or insulation on ductwork per the material schedule on sheet M010.
- Install volume control dampers in lined duct with methods to avoid damage to liner and to avoid erosion of duct liner.
- Install fire and smoke dampers according to manufacturer's UL approved written instructions.
- Install fusible links in fire dampers.
- Provide saddle taps at tees for exposed ductwork.

3.2 TESTING, ADJUSTING, AND BALANCING

- The Tenant will supply an independent balance agent to to balance and adjust the HVAC installation. The balance agent will be responsible for any pulley or belt changes required.
- The GC is to have trained staffed available during the balancing to correct issues noted by the balance agent.
- The balance agent is to balance airflow within distribution systems, including submains, branches, and terminals to indicated quantities +/-10%. The hood exhaust system shall be balanced to a tolerance of -0+10% and the make-up air system to a tolerance of -10+0%.
- The balance agent is to supply a copy of the balance report to the Tenant, engineer and general contractor for review.

END OF SECTION 15810

SECTION 15855 - DIFFUSERS, REGISTERS, AND GRILLES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- Submittals: None.

PART 2 - PRODUCTS

2.1 OUTLETS AND INLETS

- All air terminal devices:
 - Refer to Grills, Registers, and Diffusers Schedule for equipment schedule
 - Manufacturer: As scheduled (NO SUBSTITUTIONS)
 - Material: As scheduled.
 - Finish: As scheduled.
 - Mounting: As scheduled.

PART 3 - EXECUTION

3.1 INSTALLATION

- Coordinate location and installation with duct installation and installation of other ceiling and wall mounted items.
- Locate ceiling diffusers, registers, and grilles, as indicated on the architectural "reflected ceiling plans." Unless otherwise indicated, locate units in center of acoustical ceiling panels.

END OF SECTION 15855

HVAC GENERAL NOTES

- GENERAL NOTES APPLY TO HVAC SHEETS.
- WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE AUTHORITY HAVING JURISDICTION, INCLUDING APPLICABLE SECTIONS OF NFPA, THE MECHANICAL CODE, AND ANY INTERIM AMENDMENTS AT THE TIME OF THE PROPOSAL. PURCHASE PERMITS ASSOCIATED WITH THE WORK. OBTAIN INSPECTIONS REQUIRED BY CODE. SEE ARCHITECTURAL SHEETS FOR THE PREVAILING CODES.
- CONTRACTOR AND SUBCONTRACTORS SHALL REVIEW A COMPLETE SET OF THE CONSTRUCTION DOCUMENTS.
- COORDINATE WORK WITH THE WORK OF OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND OF THE EXISTING CONDITIONS AT THE PROJECT SITE.
- DRAWINGS FOR THE MECHANICAL WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWING SHALL NOT BE SCALED FOR EXACT MEASUREMENTS, REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, OFFSETS, ACCESSORIES, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
- DUCT DIMENSIONS ON PLANS INDICATE DIMENSIONS OF INTERNAL FREE AREA.
- PERFORATED CEILING DIFFUSERS SHALL BE 4-WAY UNLESS NOTED OTHERWISE.
- COORDINATE ROOF WORK WITH THE OWNER'S CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
- UNLESS NOTED OTHERWISE RECTANGULAR DUCT ELBOWS GREATER THAN 45° SHALL BE MITERED ELBOWS WITH DOUBLE-THICKNESS TURNING VANES AND RECTANGULAR DUCT ELBOWS 45° OR LESS SHALL BE RADIUSSED ELBOWS WITH AN INSIDE RADIUS OF AT LEAST 1/2 THE WIDTH OF THE DUCT.
- REPLACE AIR FILTERS WITH NEW, CLEAN MERV 8 AIR FILTERS AT TURNOVER.
- THE TERM "FURNISH" MEANS SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS. THE TERM "INSTALL" DESCRIBES THE OPERATIONS AT THE PROJECT SITE INCLUDING THE ACTUAL UNLOADING, UNPACKING, ASSEMBLY, ERECTING, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS. THE TERM "PROVIDE" MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE.
- INSTALL LABELING CALLED FOR IN THE MECHANICAL DRAWINGS USING ENGRAVED PHENOLIC PLATES (WITH BLACK LETTERING).
- PROVIDE P3000 12 GA. UNISTRUT WITH PG FINISH FOR DUCT SUPPORTS AND OTHER UNISTRUT IN AREAS EXPOSED TO VIEW. SLOTTED UNISTRUT AND OTHER UNISTRUT WITH HOLES IS NOT ACCEPTABLE.

HVAC MATERIAL SCHEDULE

| | APPLICATION | ALLOWABLE MATERIAL |
|------|--------------------------------|--|
| DUCT | | |
| | CONCEALED, GENERAL EXHAUST | RECT. OR ROUND AS SHOWN |
| | CONCEALED, RETURN | RECT. OR ROUND AS SHOWN, LINED OR INSULATED |
| | CONCEALED, SUPPLY | RECT. OR ROUND AS SHOWN, LINED OR INSULATED |
| | CONCEALED, TYPE I HOOD EXHAUST | RECTANGULAR 16 GA. BLACK IRON W/ WRAP OR UL 1978 FACTORY-MANUFACTURED DUCT W/ WRAP (SUBMIT SHOP DRAWINGS FOR FACTORY-MANUFACTURED DUCT PRIOR TO ORDERING FOR APPROVAL) |
| | EXPOSED GENERAL EXHAUST | RECTANGULAR, NO EXPOSED DUCT-SEALING MASTIC |
| | EXPOSED RETURN | RECTANGULAR, NO EXPOSED DUCT-SEALING MASTIC |
| | EXPOSED SUPPLY | RECT. LINED OR ROUND AS SHOWN, NO EXPOSED DUCT-SEALING MASTIC |

HVAC ABBREVIATIONS

| | |
|-------|---------------------------------|
| (E) | EXISTING |
| ABV | ABOVE |
| ADA | AMERICANS WITH DISABILITIES ACT |
| AFB | ABOVE FINISHED FLOOR |
| AFG | ABOVE FINISHED GRADE |
| AHJ | AUTHORITY HAVING JURISDICTION |
| BFF | BELOW FINISHED FLOOR |
| BFG | BELOW FINISHED GRADE |
| BOH | BACK OF HOUSE |
| CLG | CEILING |
| CTE | CONNECT TO EXISTING |
| DN | DOWN |
| EXT'G | EXISTING |
| FLR | FLOOR |
| FOH | FRONT OF HOUSE |
| GYP | GYPSUM BOARD |
| NTS | NOT TO SCALE |
| O/H | OVERHEAD |
| OBD | OPPOSED BLADE DAMPER |
| TYP | TYPICAL |
| U/G | UNDERGROUND |
| UNO | UNLESS NOTED OTHERWISE |
| VFD | VARIABLE FREQUENCY DRIVE |
| VSC | VARIABLE SPEED CONTROLLER |
| W/ | WITH |
| WIC | WALK-IN COOLER |

| | |
|-------|--|
| CO2AS | TENANT'S CO2 ALARM SUPPLIER |
| GC | GENERAL CONTRACTOR |
| HES | TENANT'S HVAC EQUIPMENT SUPPLIER |
| HS | TENANT'S HOOD SUPPLIER |
| KES | TENANT'S KITCHEN EQUIPMENT SUPPLIER |
| LL | LANDLORD |
| MSS | TENANT'S MUSIC SYSTEMS SUPPLIER |
| SPS | TENANT'S SODA POP SUPPLIER |
| TAB | TENANT'S TEST AND BALANCE VENDOR |
| TCC | TENANT'S CABLING CONTRACTOR |
| TDC | TENANT'S DUCT CLEANER |
| TEMS | TENANT'S ENERGY MANAGEMENT SYSTEM SUPPLIER |
| TLS | TENANT'S LIGHT/LAMP SUPPLIER |
| TMB | TENANT'S MENU BOARD SUPPLIER |
| TMS | TENANT'S MILLWORK SUPPLIER |
| TP | TENANT'S PHONE SUPPLIER |
| TPS | TENANT'S PANELBOARD SUPPLIER |
| TRS | TENANT'S RAILING SUPPLIER |
| TSV | TENANT'S SIGN VENDOR |
| TUV | TENANT'S UV SNAITIZER SUPPLIER |
| WCS | TENANT'S WALK-IN COOLER SUPPLIER |
| WHS | TENANT'S WATER HEATER SUPPLIER |

HVAC SYMBOLS

| | |
|--|---|
| | CEILING DIFFUSER |
| | CEILING-MOUNTED RETURN OR EXHAUST REGISTER |
| | SUPPLY REGISTER |
| | RETURN GRILLE |
| | FLEXIBLE DUCT |
| | MITERED CORNER WITH TURNING VANES |
| | DUCTWORK INTERNAL FREE DIMENSIONS (WIDTH/HEIGHT) |
| | RECTANGULAR TO ROUND DUCT TRANSITION |
| | DUCT-MOUNTED SMOKE DETECTOR |
| | MOTOR-OPERATED DAMPER |
| | MANUAL VOLUME DAMPER |
| | GREASE DUCT CLEANOUT |
| | MITERED CORNER WITHOUT TURNING VANES |
| | GRIDPOINT THERMOSTAT |
| | GRIDPOINT ZONE SENSOR MODULE |
| | GRIDPOINT SUPPLY PROBE |
| | PLAN NOTE: SEE PLAN NOTES LISTED ON THE SAME SHEET FOR NOTE MEANING |
| | CONNECT TO EXISTING |
| | EQUIPMENT TAG: SEE EQUIPMENT SCHEDULE ON SHEET M600 FOR EQUIPMENT INFORMATION |
| | AUDIO/VISUAL REMOTE SMOKE DETECTOR ANNUNCIATOR WITH REMOTE KEY OPERATED RESET |
| | GRILL, REGISTER, OR DIFFUSER TAG: TAG NECK SIZE AIRFLOW [CFM] |

| CHD | DATE | REVISION |
|-----|----------|--------------------|
| 5 | | |
| 4 | | |
| 3 | 04/09/25 | CONSTRUCTION SET |
| 2 | 03/20/25 | UPDATED PERMIT SET |
| 1 | 11/05/24 | BULLETIN 1 |
| 0 | 10/17/24 | PERMIT SET |

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DATE: 08/30/2024
DRAWN BY: J. BOWMAN
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BROOKLYN, NY 11225

SHEET 1 OF 4
SHEET TITLE:

M-010.00

HVAC SPECIFICATIONS

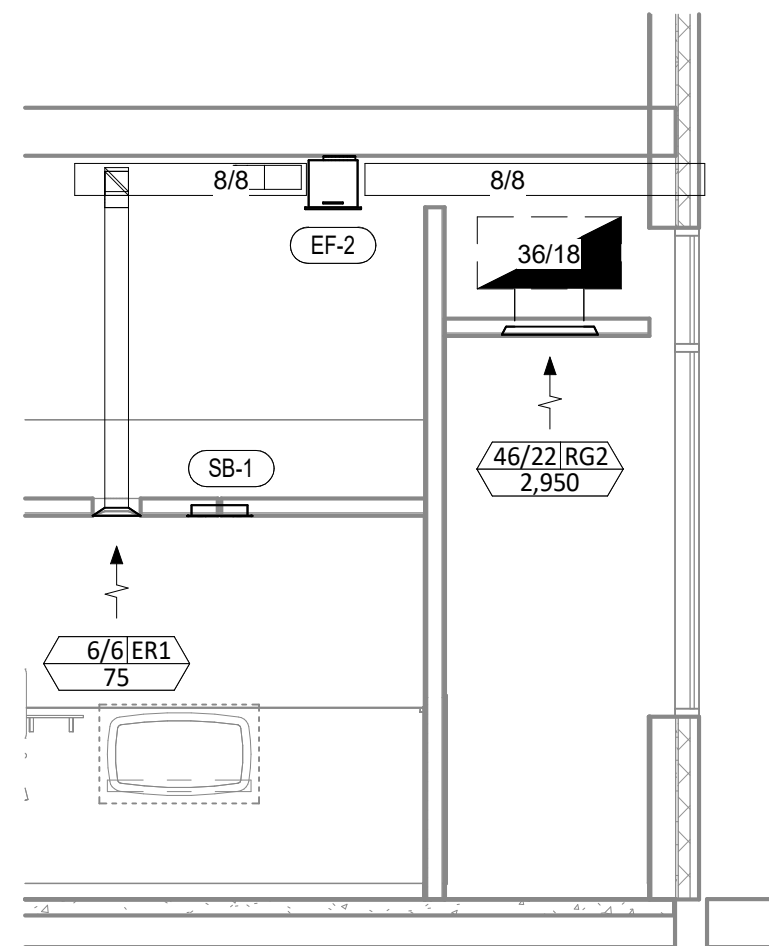
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HVAC PLAN NOTES

- SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING MOUNTED EQUIPMENT LOCATION. TYPICAL.
- PAINT DUCTWORK VISIBLE THROUGH DINING ROOM SUPPLY REGISTERS BLACK. TYPICAL.
- NOT USED.
- INSTALL HP-2A-1 AND HP-2B-1 HANGING PER STRUCTURAL DRAWINGS. PROVIDE MIXING BOX WITH 18/18 RA AND OA CONNECTIONS. ENSURE ALL MANUFACTURER SERVICE CLEARANCE REQUIREMENTS ARE SATISFIED. ROUTE REFRIGERANT LINESET (SIZED BY MANUFACTURER) TO ASSOCIATED HEAT PUMP OUTDOOR UNIT ON ROOF. SEE SCHEDULE AND DETAIL FOR MORE INFORMATION.
- INSTALL HP-1A AND HP-1B-1 HANGING PER STRUCTURAL DRAWINGS. ENSURE ALL MANUFACTURER SERVICE CLEARANCE REQUIREMENTS ARE SATISFIED. ROUTE REFRIGERANT LINESET (SIZED BY MANUFACTURER) TO ASSOCIATED HEAT PUMP OUTDOOR UNIT ON ROOF. SEE SCHEDULE AND DETAIL FOR MORE INFORMATION.
- 10/18 EXHAUST DUCT UP THROUGH ROOF. SEE ROOF PLAN FOR ROOF DUCTING TO EF-1.
- SLOPE GREASE EXHAUST DUCT A MINIMUM OF 1/4" PER FOOT.
- INSTALL LOUVER'S L-2 IN WINDOW BAY PER ARCHITECTURAL DRAWINGS. SEE SCHEDULE FOR MORE INFORMATION.
- INSTALL LOUVERS L-1 IN WINDOW BAY PER ARCHITECTURAL DRAWINGS. PROVIDE MOTORIZED DAMPER, SEE SCHEDULE FOR MORE INFORMATION.
- NOT USED.
- NOT USED.
- NOT USED.
- INSTALL SINGLE-GANG VERTICAL J-BOX FOR GRIDPOINT THERMOSTATS FURNISHED BY TEMS FOR RTU-1 AND RTU-2 AT THIS LOCATION AT 48" AFF. COORDINATE WITH ELECTRICAL SWITCHING IN THIS AREA. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- INSTALL GRIDPOINT ZONE SENSOR MODULE FURNISHED BY TEMS FOR HP-1 AT THIS LOCATION 72" AFF DIRECTLY TO WALL (NO JUNCTION BOX). COORDINATE LOCATION WITH EQUIPMENT. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- INSTALL GRIDPOINT ZONE SENSOR MODULE FURNISHED BY TEMS FOR HP-2 AT THIS LOCATION 66" AFF DIRECTLY TO WALL (NO JUNCTION BOX). COORDINATE LOCATION WITH EQUIPMENT. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- INSTALL GRIDPOINT SUPPLY PROBE FURNISHED BY TEMS FOR HP-1 IN THE SUPPLY DUCTWORK UPSTREAM FROM THE FIRST BRANCH CONNECTION. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- INSTALL GRIDPOINT SUPPLY PROBE FURNISHED BY TEMS FOR HP-2 IN THE SUPPLY DUCTWORK UPSTREAM FROM THE FIRST BRANCH CONNECTION. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- INSTALL REMOTE TEMPERATURE SENSOR FOR HOOD HD-1 AT THIS LOCATION 72" AFF. COORDINATE LOCATION WITH EQUIPMENT. PROVIDE (2) #18 G. THERMISTOR CABLE FROM TEMPERATURE SENSOR TO HOOD CONTROL PANEL.
- INSTALL KITCHEN HOOD, HD-1. SUPPORT HOOD PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL HOOD ACCORDING TO THE REQUIREMENTS OF ITS LISTING, IN COMPLIANCE WITH NFPA 96, THE BUILDING CODE, AND AUTHORITIES HAVING JURISDICTION. HOOD SHALL HAVE AN INTEGRAL DUCT COLLAR TEMPERATURE SENSOR TO AUTOMATICALLY ENERGIZE THE EXHAUST AND HEAT PUMP INDOOR UNIT FANS IF COOKING TEMPERATURES ARE DETECTED. EXHAUST DUCT SYSTEM TO BE WELDED OR FACTORY-MANUFACTURED WATER AND AIR TIGHT. INSTALL CLEANOUTS PER CODE AND AS SHOWN. INSTALL HOOD PER DETAILS 2, 4, AND 9/M700. CHIPOTLE WILL PROVIDE AN INDEPENDENT TESTING AGENCY FOR TESTING THE INTEGRITY OF THE GREASE DUCT SYSTEM.

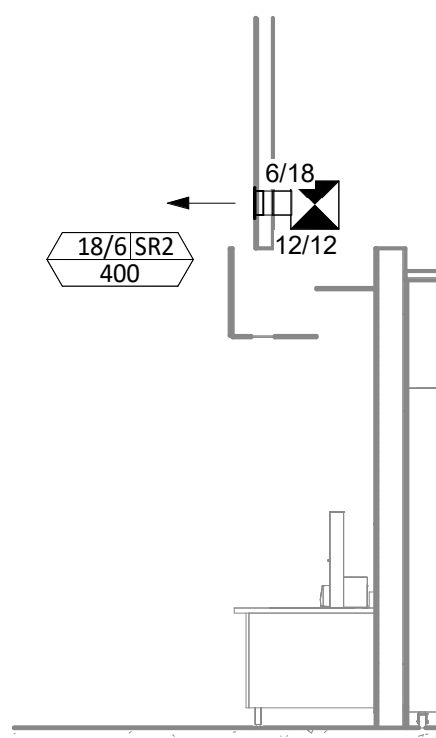
HVAC PLAN NOTES

- INSTALL REMOTE CONDENSING UNIT FOR WALK-IN COOLER HANGING FROM STRUCTURE AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. INSTALLATION SHALL COMPLY WITH ASHRAE/ANSI STANDARD 15. CUT 2-1/2" HOLE IN WALK-IN COOLER ROOF FOR REFRIGERANT LINE SET AND SEAL PER THE COOLER MANUFACTURER'S INSTALLATION INSTRUCTIONS AFTER LINE SET IS INSTALLED.
- INSTALL REMOTE CONDENSER FOR ICE MACHINE HANGING FROM STRUCTURE AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. SEAL PIPING PENETRATIONS THROUGH ROOF. INSTALLATION SHALL COMPLY WITH ASHRAE/ANSI STANDARD 15. IF REFRIGERANT PIPING TO ICE MAKER IS EXPOSED TO PUBLIC VIEW CONCEAL WITHIN A STAINLESS STEEL SHROUD AS SHOWN IN THE ARCHITECTURAL DRAWINGS.
- INSTALL ROOFTOP EQUIPMENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- INSTALL EXHAUST FAN EF-1 PER DETAIL 5/M700 AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- PROVIDE SUPPLY DIFFUSER CONNECTION TO SUPPLY SYSTEM PER DETAIL 1/M700. TYPICAL.
- PROVIDE AUDIO/VISUAL REMOTE SMOKE DETECTOR ANNUNCIATOR WITH REMOTE KEY OPERATED RESET. WIRE A UNIT BACK TO EACH SMOKE DETECTOR. MOUNT UNIT 60" AFF. TYPICAL.
- INSTALL REME HALO AIR PURIFIER FURNISHED BY TUV IN RTU PER DETAIL 6/M700. SEE ELECTRICAL DRAWINGS FOR POWER CONNECTION INFORMATION. INSTALL UV WARNING STICKERS ON FACE OF ENCLOSURE PER DETAIL AND ON ANY RTU ACCESS DOOR(S) THROUGH WHICH THE REME HALO WOULD BE VISIBLE IF OPENED.
- ADJUST SUPPLY REGISTERS SO THAT SUPPLY AIR HITS WALL ON OPPOSITE SIDE OF ROOM AT APPROXIMATELY 7' AFF WITH NO DRAFTS FELT IN THE DINING ROOM.
- INSTALL HEAT PUMP OUTDOOR UNIT ON SNOW LEGS PER DETAIL 10/M700. SEE SCHEDULE FOR MORE INFORMATION.
- 8" EXHAUST AIR WALL CAP, MOUNT AT 10'-0" A.F.F. ON CENTER.
- 10X18 GREASE EXHAUST DUCT DOWN IN CHASE.
- TRANSFER GRILL OPEN TO AREA ABOVE CEILING.
- PROVIDE GREASE DUCT CLEANOUT.
- ENSURE 6' FIRE DEPARTMENT WALKING CLEARANCE IS MET FOR UNIT INSTALLATION. SEE ARCHITECTURAL SHEETS FOR MORE INFORMATION.
- INSTALL DUCT HEATER IN OUTSIDE AIR DUCT PER MANUFACTURERS INSTALLATION DETAILS.
- PROVIDE ACCESS PANEL IN WALL FOR DUCT HEATER SERVICE.



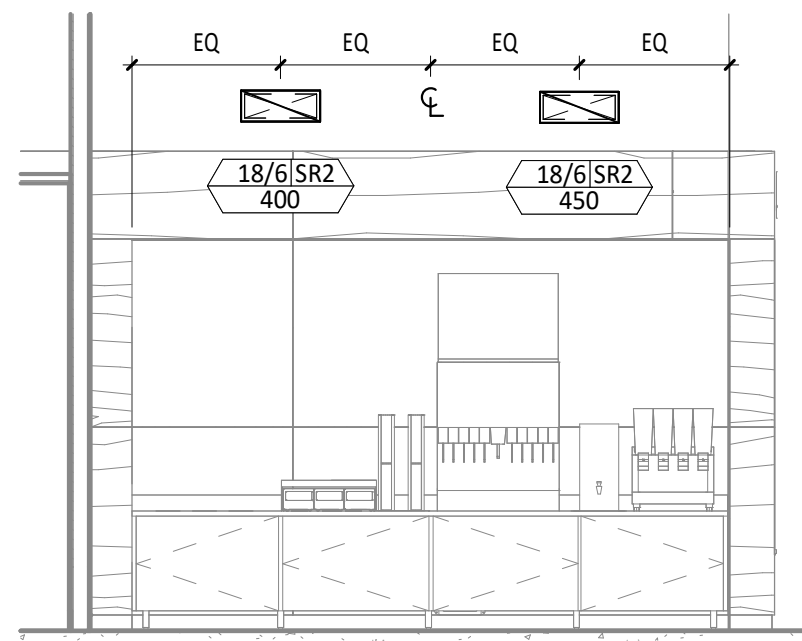
HVAC DINING ROOM RETURN SECTION

M-100.00 1/4" = 1'-0"



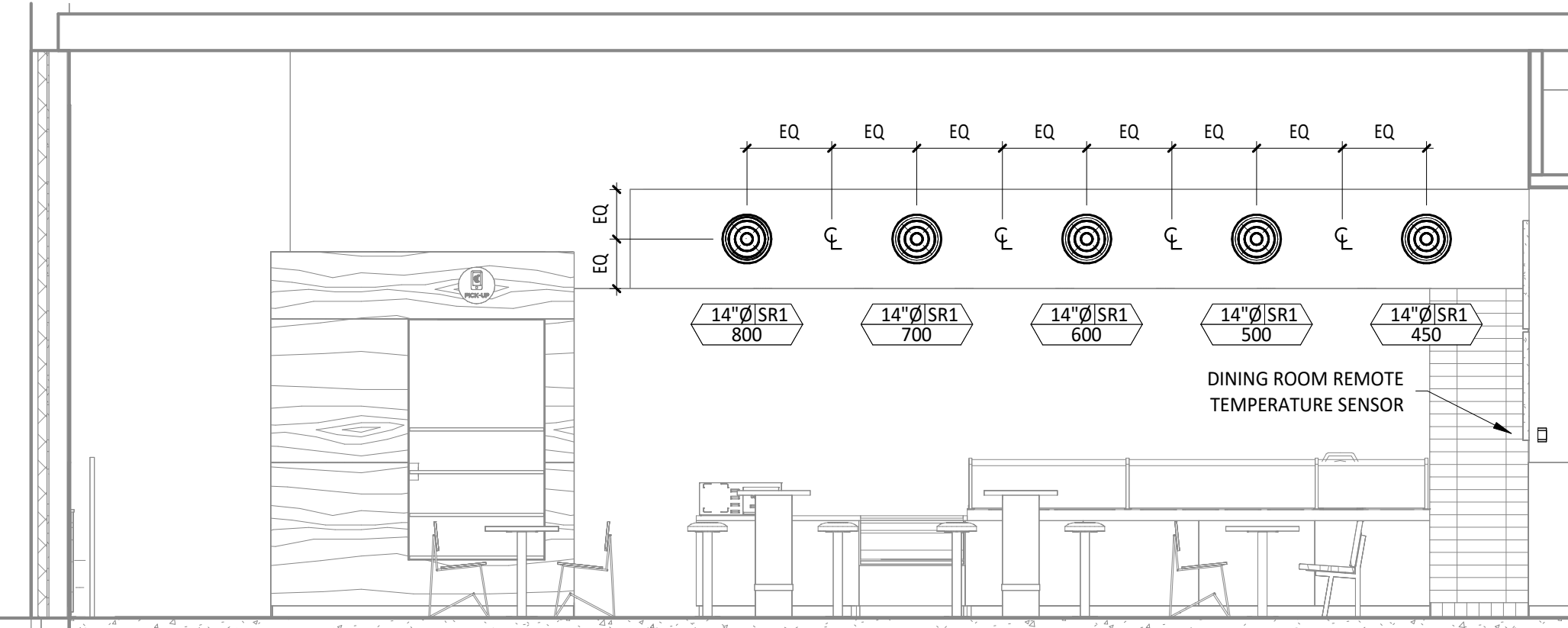
HVAC DINING ROOM SECTION

M-100.00 1/4" = 1'-0"



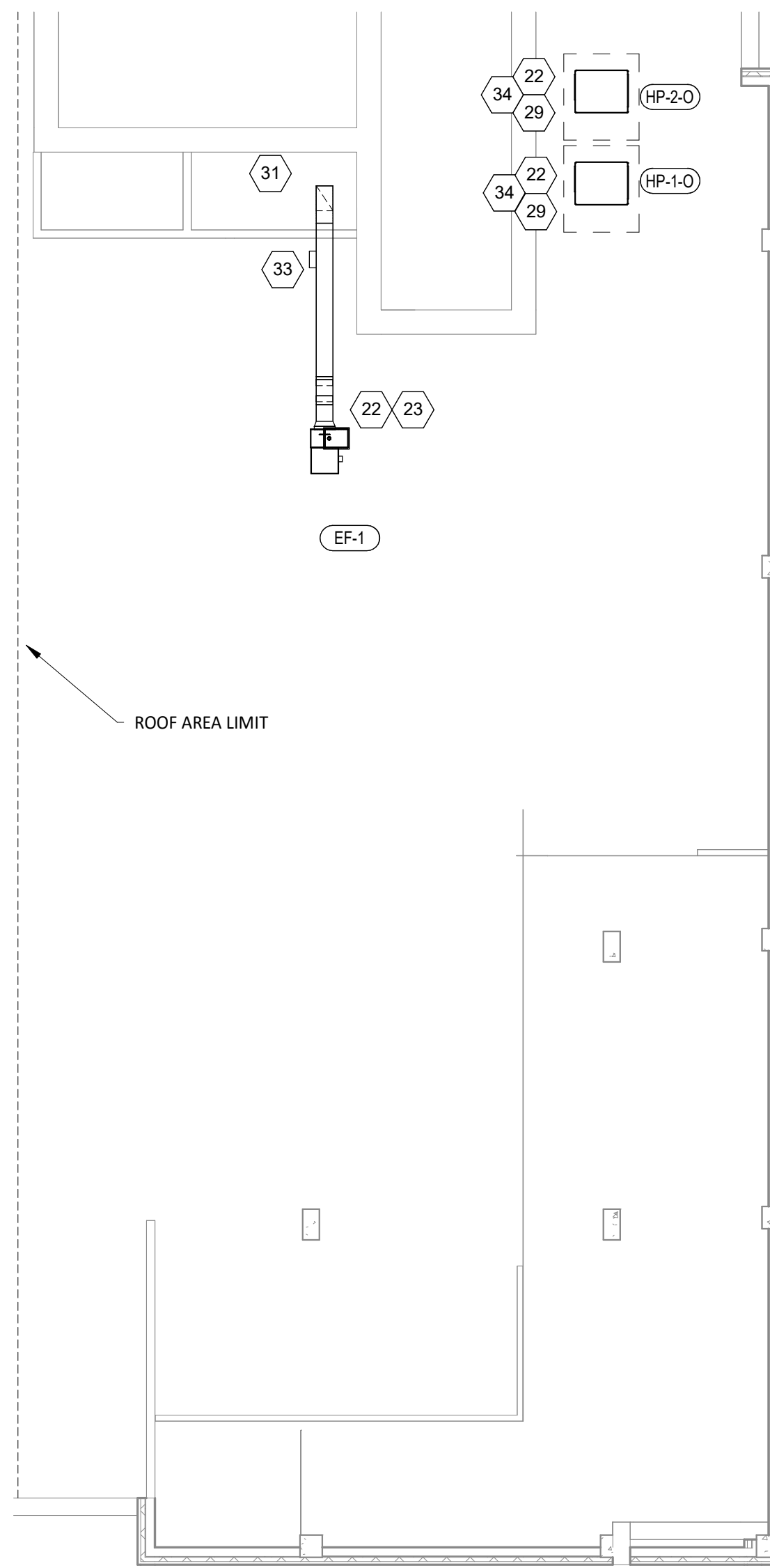
HVAC DINING ROOM SECTION

M-100.00 1/4" = 1'-0"



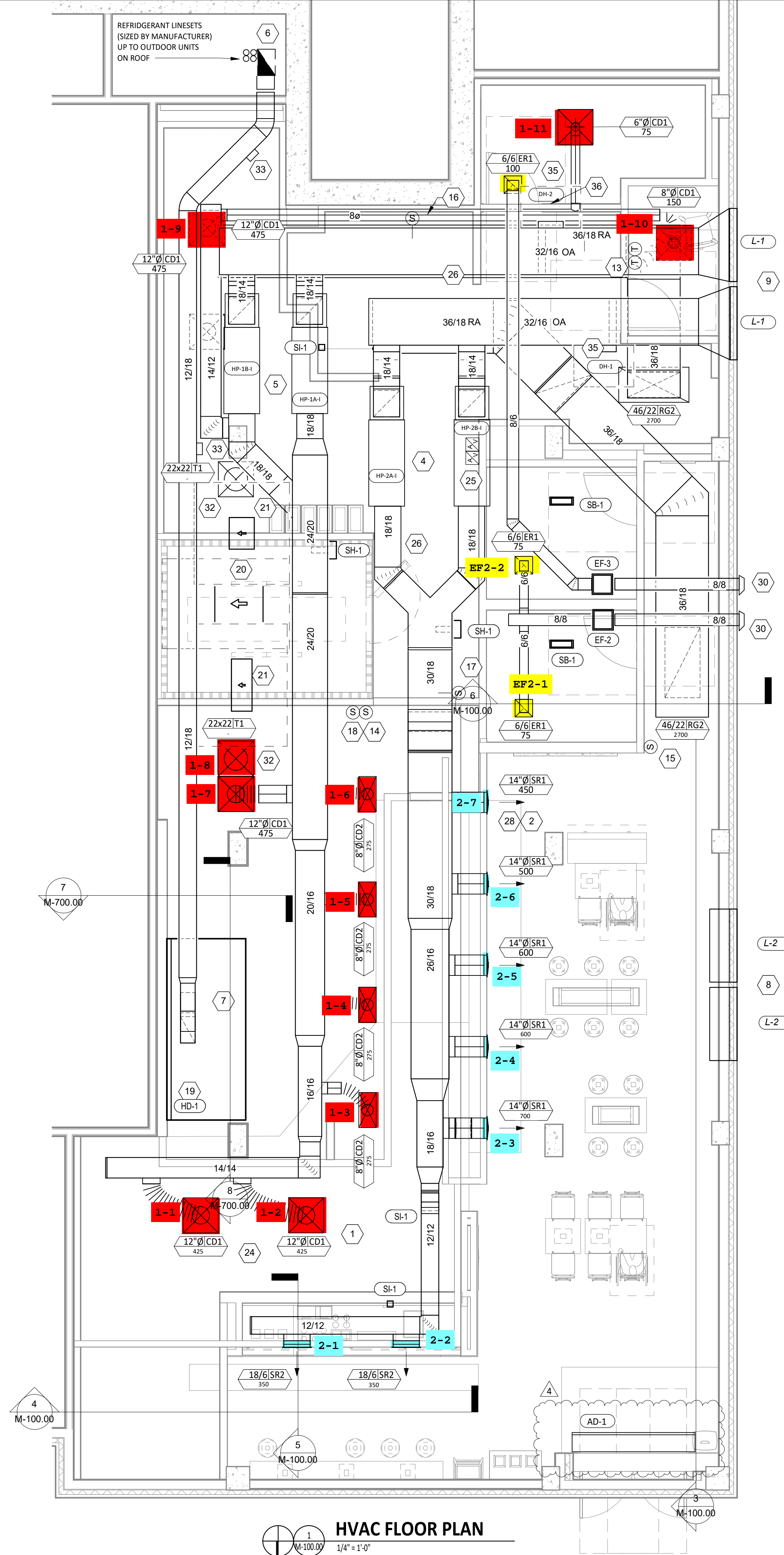
HVAC DINING ROOM SECTION

M-100.00 1/4" = 1'-0"



HVAC ROOF PLAN

M-100.00 1/8" = 1'-0"



HVAC FLOOR PLAN

M-100.00 1/4" = 1'-0"

| NO. | DATE | DESCRIPTION |
|-----|----------|--------------------|
| 0 | 10/17/24 | PERMIT SET |
| 1 | 11/05/24 | BULLETIN 1 |
| 2 | 03/20/25 | UPDATED PERMIT SET |
| 3 | 04/09/25 | CONSTRUCTION SET |
| 4 | 04/16/25 | REVISION 4 |
| 5 | | |

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LANDSCAPE ARCHITECT WHO SIGNED THIS DRAWING TO ALTER THIS DRAWING IN ANY WAY.

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CHIPOTLE MEXICAN GRILL, INC.
**1730 BEDFORD AVE.
 BROOKLYN, NY 11225**

SHEET 2 OF 4
 SHEET TITLE:
M-100.00
 HVAC PLAN - 1ST FLOOR
 LOWER LEVEL
 DOB NOW Job# B01156614-51

4

AIR DOOR SCHEDULE

| TAG | MANUFACTURER | MODEL | AIRFLOW | | | ELECTRICAL | | | | FURNISHED BY | INSTALLED BY |
|------|--------------|-----------|-----------|---------------|------|------------|----------------|------|------|--------------|--------------|
| | | | MAX SPEED | AVERAGE SPEED | CFM | POWER | VOLTS/PHASE/HZ | MCA | MOCP | | |
| AD-1 | BERNER | A108107ZE | 2149 | 1582 | 1780 | 11.2 KW | 208/3/60 | 32.8 | 45 | GC | GC |

AIR BALANCE SCHEDULE

| TAG | SUPPLY | RETURN | OUTSIDE AIR | EXHAUST AIR |
|---------------------|--------|--------|-------------|-------------|
| HP-1A-I | 1800 | 1250 | 550 | - |
| HP-1B-I | 1800 | 1250 | 550 | - |
| HP-2A-I | 1800 | 1250 | 550 | - |
| HP-2B-I | 1800 | 1250 | 550 | - |
| EF-1 | - | - | - | 1900 |
| EF-2 | - | - | - | 150 |
| EF-3 | - | - | - | 100 |
| TOTAL | | | 2200 | 2150 |
| NET PRESSURIZATION= | | | +50 | |

CONTROL FUNCTIONS

A. THE MAIN COOKING EXHAUST FAN AND HEAT PUMP UNIT SHALL BE INTERLOCKED TO OPERATE TOGETHER. THIS CONTROL CIRCUIT IS ACTIVATED BY A SWITCH AND INCLUDES A FIRE PROTECTION OVERRIDE.

B. THE TEMPERATURE IN EACH ZONE IS CONTROLLED BY SPACE TEMPERATURE SENSORS CONNECTED TO THE THERMOSTATS LOCATED IN THE OFFICE. ALL ZONES SHALL OPERATE WITH CONTINUOUS FAN OPERATION DURING OCCUPIED TIMES AND INTERMITTENTLY AS NEEDED TO MAINTAIN SET POINTS DURING UNOCCUPIED TIMES. OUTSIDE AIR DAMPERS SHALL BE OPEN CONTINUOUSLY WHEN EITHER IN OCCUPIED MODE OR WHEN THE HOOD SYSTEM IS ON AND SHALL BE CLOSED DURING UNOCCUPIED PERIODS.

C. THE THERMOSTATS SHALL DETERMINE OCCUPIED/UNOCCUPIED STATUS BASED ON THE SCHEDULE IN THE ENERGY MANAGEMENT SYSTEM.

LOUVER SCHEDULE

| TAG | MANUFACTURER | MODEL | MATERIAL | COLOR | SIZE (INCHES) WIDTH/HEIGHT | FREE AREA (SQ. FT.) | FLOW (CFM) | PRESS. DROP (IN. WC) | SERVES | NOTES |
|-----|--------------|---------|-----------|---------|----------------------------|---------------------|------------|----------------------|---------------|--------|
| L-1 | GREENHECK | SED-501 | ALUMINIUM | BY ARCH | 50x27 | 4.8 | 3600 | 0.24 | HP-1/2 OA | 1-5 |
| L-2 | GREENHECK | SED-501 | ALUMINIUM | BY ARCH | 50x27 | 4.8 | 3600 | 0.24 | HP-1/2 RELIEF | 1-4, 6 |

NOTES:
 1. COLOR AS SPECIFIED BY ARCHITECT.
 2. WITH BIRD SCREEN.
 3. WITH FACE FLANGE.
 4. FREE AREA LISTED IS MINIMUM REQUIRED.
 5. WITH MOTORIZED DAMPER.
 6. WITH RELIEF DAMPER SET TO OPEN AT +0.1" W.C. (ADJUSTABLE).

EQUALS BY: ENGINEER APPROVED EQUAL.

CONDENSING UNIT SCHEDULE

| TAG | DESCRIPTION | NOMINAL CAPACITY | NUMBER OF | | REFRIGERANT | | ELECTRICAL | | | FURNISHED BY | INSTALLED BY | BASIS FOR DESIGN | | REMARKS | |
|------|---|------------------|-------------|----------|-------------|----------|------------|------|-----|--------------|--------------|------------------|--------------|---------------|-------------------------------|
| | | | COMPRESSORS | CIRCUITS | TYPE | CHARGE | WEIGHT | MOCP | FLA | | | V/P/H | MANUFACTURER | | MODEL |
| CU-1 | CONDENSING UNIT - WALK-IN COOLER | | 1 | 1 | R-404A | 10.4 lb | 250 lb | 15 A | 9 A | 208/3/60 | WCS | GC | HARFORD | KPCL95M20P-3E | FURNISHED WITH WALK-IN COOLER |
| CU-2 | REMOTE CONDENSER - LOW CAPACITY ICE MAKER | | 0 | 1 | R-404A | 11.46 lb | 100 lb | | | 120/1/60 | KES | GC | HOSHIZAKI | URC-9FZ | FURNISHED WITH ICE MAKER |
| CU-3 | REMOTE CONDENSER - SODA MACHINE ICE MAKER | | 0 | 1 | R-404A | 3.86 lb | 100 lb | | | 120/1/60 | KES | GC | HOSHIZAKI | URC-5FZ | FURNISHED WITH ICE MAKER |

HEAT PUMP SCHEDULE

| TAG | MANUFACTURER | MODEL | SERVICE | OPERATING CONDITIONS | | | SUPPLY FAN DATA | | | ELECTRICAL DATA | | | COOLING | | HEAT PUMP HEATING | | OP. WT. (LBS) | NOTES | |
|---------|--------------|--------------|---------|----------------------|-----------------|-------------------|------------------|-------------------|---------------|-----------------|-----|------|---------|-----|--------------------|---------------------|---------------|-------|------------------|
| | | | | OAT DB (DEG F.) | OAT WB (DEG F.) | COIL EAT (DEG F.) | MOTOR POWER (HP) | E.S.P. (IN. W.C.) | AIRFLOW (CFM) | VOLTS/PH | MOP | MCA | IEER | EER | NET CAPACITY (MBH) | SENS CAPACITY (MBH) | | | AT 17 DEG F. COP |
| HP-1-O | YORK | YVAHP144B32S | BOH | 92 | 74 | - | - | - | 208/3 | 70 | 58 | 21.2 | 11.2 | 138 | 114 | 2.15 | 110 | 723 | A-F |
| HP-1A-I | YORK | TIAH060B22M | BOH | 92 | 74 | 83.2 | 0.75 | 0.8 | 1800 | 208/1 | 30 | 29 | - | 65 | 53.8 | - | 56 | 168 | G,H,I |
| HP-1B-I | YORK | TIAH060B22M | BOH | 92 | 74 | 83.2 | 0.75 | 0.8 | 1800 | 208/1 | 30 | 29 | - | 65 | 53.8 | - | 56 | 168 | G,H,I |
| HP-2-O | YORK | YVAHP144B32S | FOH | 92 | 74 | - | - | - | 208/3 | 70 | 58 | 21.2 | 11.2 | 138 | 114 | 2.15 | 110 | 723 | A-F |
| HP-2A-I | YORK | TIAH060B22M | FOH | 92 | 74 | 83.2 | 0.75 | 0.8 | 1800 | 208/1 | 30 | 29 | - | 65 | 53.8 | - | 56 | 168 | G,H,I |
| HP-2B-I | YORK | TIAH060B22M | FOH | 92 | 74 | 83.2 | 0.75 | 0.8 | 1800 | 208/1 | 30 | 29 | - | 65 | 53.8 | - | 56 | 168 | G,H,I |

NOTES:
 A. REFRIGERANT LINE SET, SIZED BY MANUFACTURER.
 B. ANTI-SHORT CYCLE TIMER.
 C. COMPRESSOR HARD START KIT.
 D. SNOW LEGS WITH EXTENSIONS, 10" TOTAL LENGTH.
 E. CRANKCASE HEATER KIT.
 F. LEVEL 4" CONCRETE PAD BY M.C.
 G. WITH CONDENSATE HIGH WATER LEVEL SENSOR AND SHUT-DOWN CONTROLS.
 H. WITH MICROMETL MB-GP20CB-DCDS MIXING BOX AND ECONOMIZER CONTROLS.
 I. WITH 5 KW ELECTRIC BACKUP HEATER (SINGLE POWER CONNECTION FOR UNIT/HEATER).

SANITIZING EQUIPMENT SCHEDULE

| TAG | COUNT | DESCRIPTION | FURNISHED BY | INSTALLED BY | BASIS FOR DESIGN | | REMARKS |
|------|-------|--------------------------------|--------------|--------------|-------------------------|--------------|---|
| | | | | | MANUFACTURER | MODEL | |
| SB-1 | 2 | BATHROOM AIR PURIFICATION UNIT | TUV | GC | RGF ENVIRONMENTAL GROUP | BRU ASSEMBLY | SEE ELECTRICAL SHEETS FOR CONNECTION INFORMATION |
| SH-1 | 2 | HVAC AIR PURIFICATION UNIT | TUV | GC | RGF ENVIRONMENTAL GROUP | REME-HALO | SEE DETAIL 6/M700 FOR INSTALLATION INFORMATION. |
| SI-1 | 2 | ICE MACHINE TREATMENT SYSTEM | TUV | GC | RGF ENVIRONMENTAL GROUP | IMS-B-GA | SEE PLUMBING DRAWINGS FOR INSTALLATION INFORMATION. |

FAN SCHEDULE

| TAG | DESCRIPTION | AIRFLOW | E.S.P. | WEIGHT | ELECTRICAL | | FURNISHED BY | INSTALLED BY | BASIS FOR DESIGN | | REMARKS |
|------|---------------------------------|-----------|------------|------------------|-------------|----------|--------------|--------------|------------------|-------------|---|
| | | | | | MOTOR POWER | V/P/H | | | MANUFACTURER | MODEL | |
| EF-1 | UPBLAST UTILITY SET EXHAUST FAN | 1,900 CFM | 2.20 in-wg | 296 lb | 2.13 hp | 208/3/60 | HS | GC | CAPTIVE-AIRE | USB120DD-RM | DIRECT DRIVE UPBLAST EXHAUST FAN FURNISHED WITH WEATHERPROOF DISCONNECT |
| EF-2 | INLINE EXHAUST FAN | 150 CFM | 0.50 in-wg | 11 lb | 0.17 hp | 115/1/60 | HS | GC | CAPTIVE-AIRE | DFA 200CA | INLINE, STRAIGHT THROUGH DISCHARGE RESTROOM EXHAUST FAN WITH CEILING VIBRATION HANGERS AND INTEGRAL SPEED CONTROL. |
| EF-3 | INLINE EXHAUST FAN | 100 CFM | 0.50 in-wg | 8 lb 1900 CFM | 0.15 hp | 115/1/60 | HS | GC | CAPTIVE-AIRE | DFA 100CA | INLINE, STRAIGHT THROUGH DISCHARGE RESTROOM EXHAUST FAN WITH CEILING VIBRATION HANGERS AND INTEGRAL SPEED CONTROL. INTERLOCK WITH HP-2-I OPERATION. |

ELECTRIC DUCT HEATER SCHEDULE

| TAG | MANUFACTURER | MODEL | SERVICE | AIR FLOW (CFM) | TEMP. RISE (DEGREES F.) | ELECTRICAL DATA | | NOTES |
|------|--------------|-------------|-------------|----------------|-------------------------|-----------------|-----------|---|
| | | | | | | WATTS OR AMPS | VOLTS/PH. | |
| DH-1 | TUTCO | E-SERIES DH | OUTSIDE AIR | 1100 | 23 | 8 kW | 208V/3PH | WITH SCR CONTROL AND CONTROL TRANSFORMER, DISCONNECT SWITCH, AND ADJUSTABLE AIRFLOW SWITCH, CONTROLLED BY DUCT MOUNTED TEMPERATURE SENSOR (UPSTREAM OF DUCT HEATER) TO ENGAGE WHEN OUTSIDE AIR IS 35 DEGREES OR LESS. |
| DH-2 | TUTCO | E-SERIES DH | OUTSIDE AIR | 1100 | 23 | 8 kW | 208V/3PH | WITH SCR CONTROL AND CONTROL TRANSFORMER, DISCONNECT SWITCH, AND ADJUSTABLE AIRFLOW SWITCH, CONTROLLED BY DUCT MOUNTED TEMPERATURE SENSOR (UPSTREAM OF DUCT HEATER) TO ENGAGE WHEN OUTSIDE AIR IS 35 DEGREES OR LESS. |

AIR TERMINAL SCHEDULE

| TAG | DESCRIPTION | FACE SIZE | MATERIAL | FINISH | MOUNTING | FURNISHED BY | INSTALLED BY | BASIS FOR DESIGN | | NOTES |
|-----|------------------------------------|---------------|-----------|--------|----------------|--------------|--------------|------------------|--------------|---|
| | | | | | | | | MANUFACTURER | MODEL | |
| CD1 | PERFORATED CEILING DIFFUSER | 24" X 24" | ALUMINIUM | WHITE | LAY-IN CEILING | GC | GC | NAILOR | 4320A TYPE L | PROVIDE WITH INTEGRAL OBD |
| CD2 | PERFORATED CEILING DIFFUSER | 24" X 12" | ALUMINIUM | WHITE | LAY-IN CEILING | GC | GC | NAILOR | 4320A TYPE L | PROVIDE WITH INTEGRAL OBD, REMOVE 4-WAY DEFLECTORS |
| ER1 | PERFORATED CEILING EXHAUST | 12" X 12" | ALUMINIUM | WHITE | SURFACE MOUNT | GC | GC | NAILOR | 4330R TYPE S | PROVIDE INTEGRAL OBD |
| RG2 | PERFORATED CEILING RETURN | 48" X 24" | ALUMINIUM | WHITE | SURFACE MOUNT | GC | GC | NAILOR | 4330R TYPE S | |
| SR1 | ADJUSTABLE TURBO NOZZLE | SEE NECK SIZE | ALUMINIUM | WHITE | WALL | GC | GC | AIR CONCEPTS | ANR-14 | PROVIDE WITH CONCEALED MOUNTING AND FACE-ACCESSIBLE OBD |
| SR2 | DOUBLE DEFLECTION SUPPLY REGISTER | SEE NECK SIZE | ALUMINIUM | WHITE | WALL | GC | GC | NAILOR | 51DH | PROVIDE WITH INTEGRAL OBD |
| T1 | PERFORATED CEILING TRANSFER GRILLE | 24" X 24" | ALUMINIUM | WHITE | LAY-IN CEILING | GC | GC | NAILOR | 4320A TYPE L | |

KITCHEN HOOD SCHEDULE

| TAG | DESCRIPTION | MANUFACTURER | MODEL | MAX COOKING TEMP | EXHAUST PLENUM | | | | # OF LIGHT FIXTURES | WEIGHT | NOTES | | | |
|------|--|--------------|-----------|------------------|----------------|-----------|-------|--------|---------------------|--------|-------|---|-----------|------|
| | | | | | AIRFLOW | E.S.P. | WIDTH | LENGTH | | | | | | |
| HD-1 | TYPE 1 CANOPY HOOD WITH PERFORATED MAU AND HVAC SUPPLY PLENUMS | CAPTIVEAIRE | 5424 ND-2 | 600 DEG. F. | 1,900 CFM | 0.818" WC | 4'-6" | 10'-4" | 1 | 10" | 18" | 6 | 1,070 LBS | 1-11 |

NOTES:
 1. 18 GAUGE TYPE 430 STAINLESS STEEL CONSTRUCTION.
 2. FURNISHED WITH VAPORPROOF INCANDESCENT LIGHT FIXTURES.
 3. 16" TALL HE SS FILTERS.
 4. INTEGRAL UTILITY CABINET.
 5. ANSUL SYSTEM.
 6. DUCT COLLAR TEMPERATURE SENSOR.
 7. PREWIRE PACKAGE.
 8. SPARE FIRE SYSTEM DRY CONTACT.
 9. 4-POLE 20A CONTACTOR.
 10. DVC-1 KITCHEN FAN CONTROL CENTER TO ENGAGE ASSOCIATED MAKE-UP AIR UNIT AND EXHAUST FAN AND CONTROL LIGHTS.
 11. UL LISTED FIRE SUPPRESSION AND GREASE COLLECTION SYSTEM.

| NO. | REVISION | DATE | CHKD |
|-----|--------------------|----------|------|
| 5 | | | |
| 4 | REVISION 4 | 04/16/25 | |
| 3 | CONSTRUCTION SET | 04/09/25 | |
| 2 | UPDATED PERMIT SET | 03/20/25 | |
| 1 | BULLETIN 1 | 11/05/24 | |
| 0 | PERMIT SET | 10/17/24 | |

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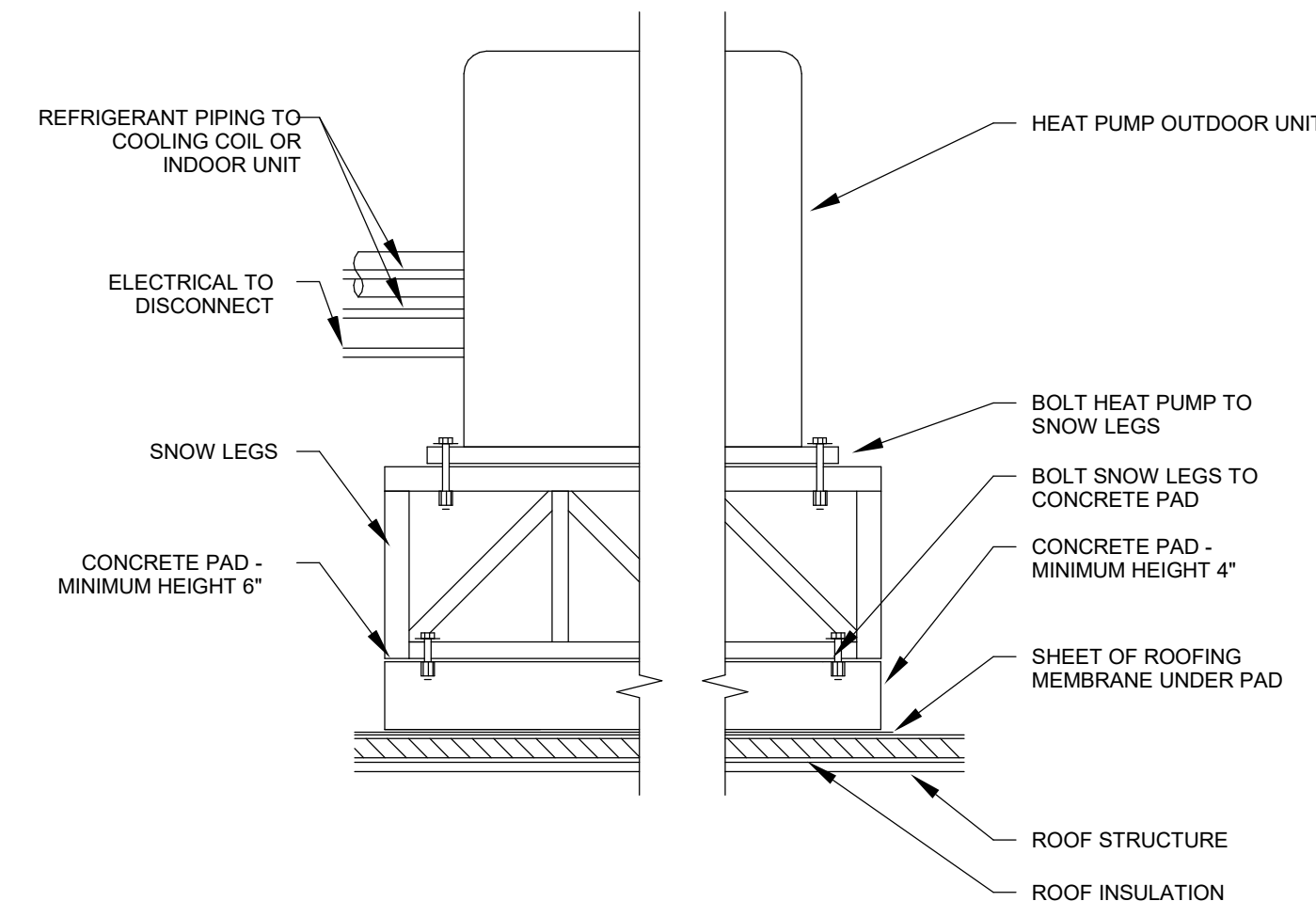
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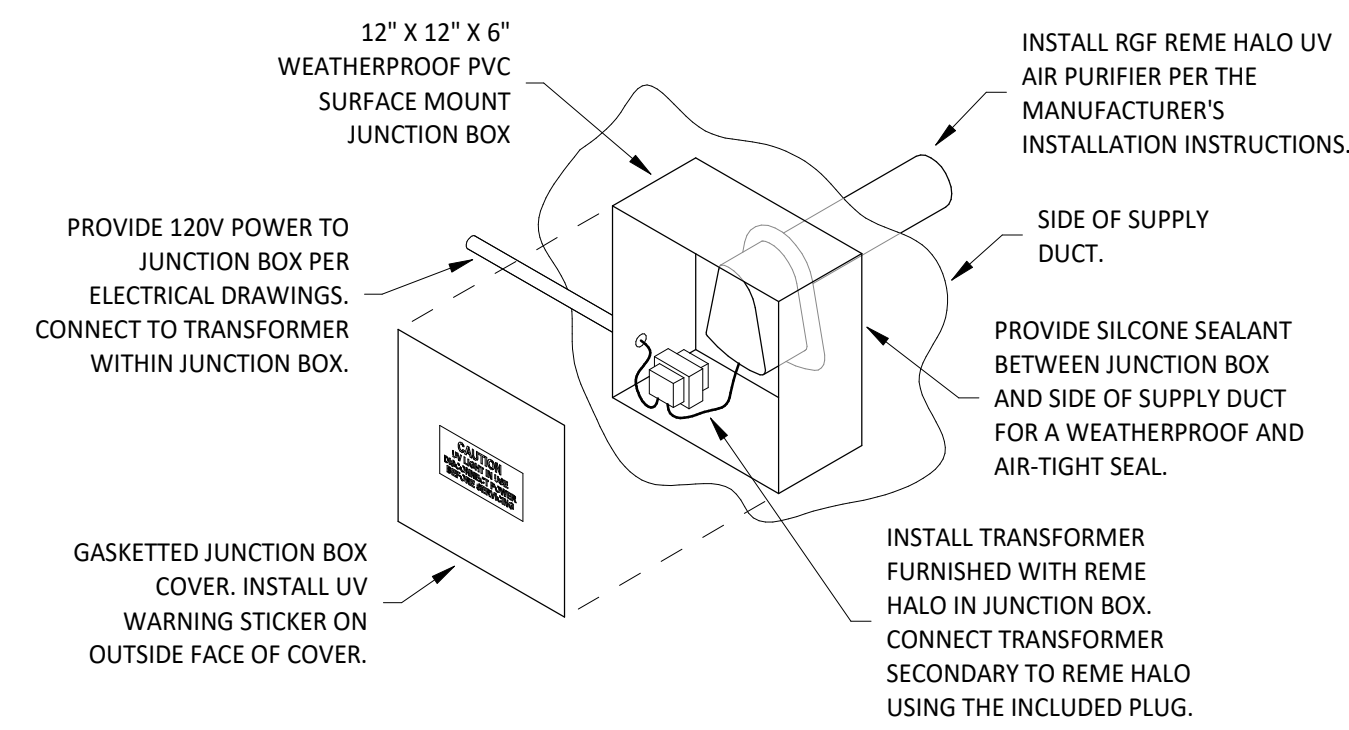
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 BROOKLYN, NY 11225

SHEET 3 OF 4
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 HVAC SCHEDULES

DOB NOW Job# B01156614-51

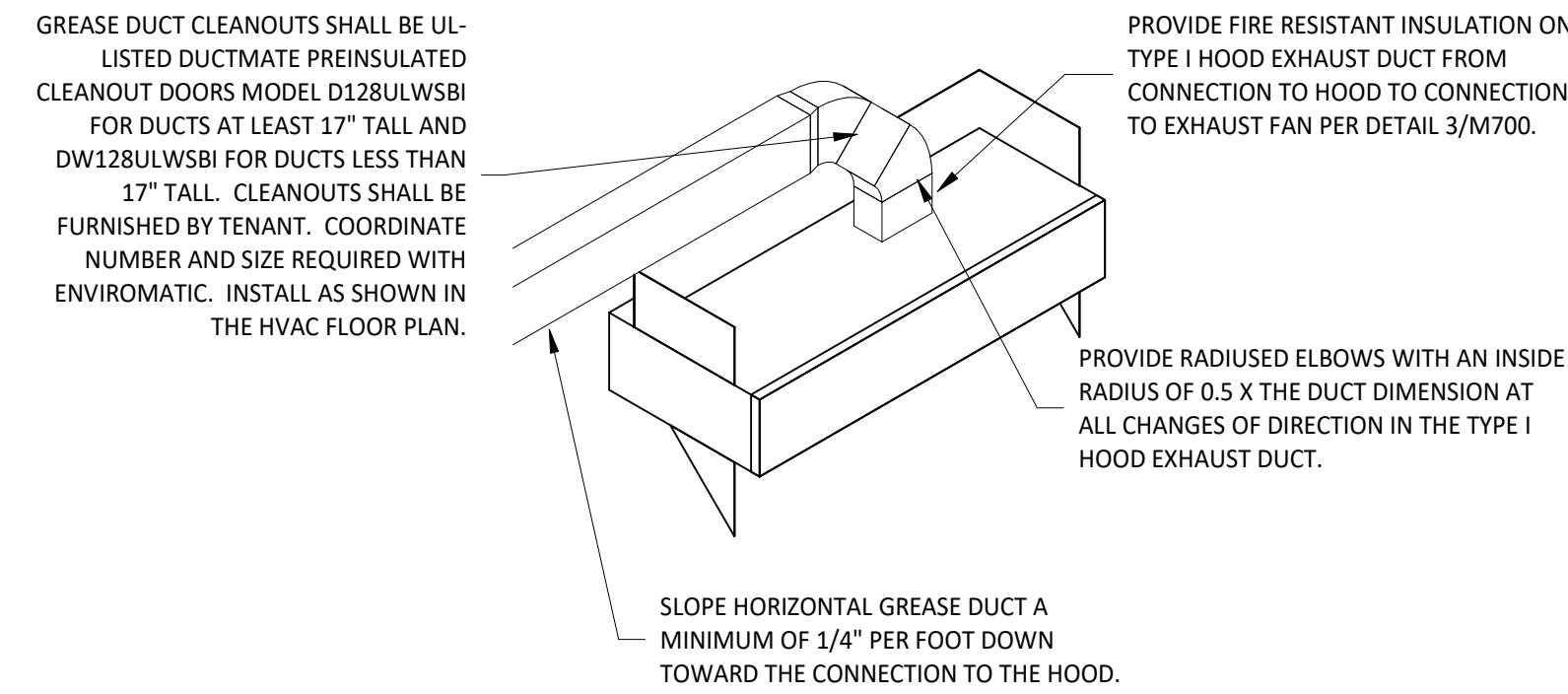


10
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HEAT PUMP OUTDOOR UNIT DETAIL
NOT TO SCALE

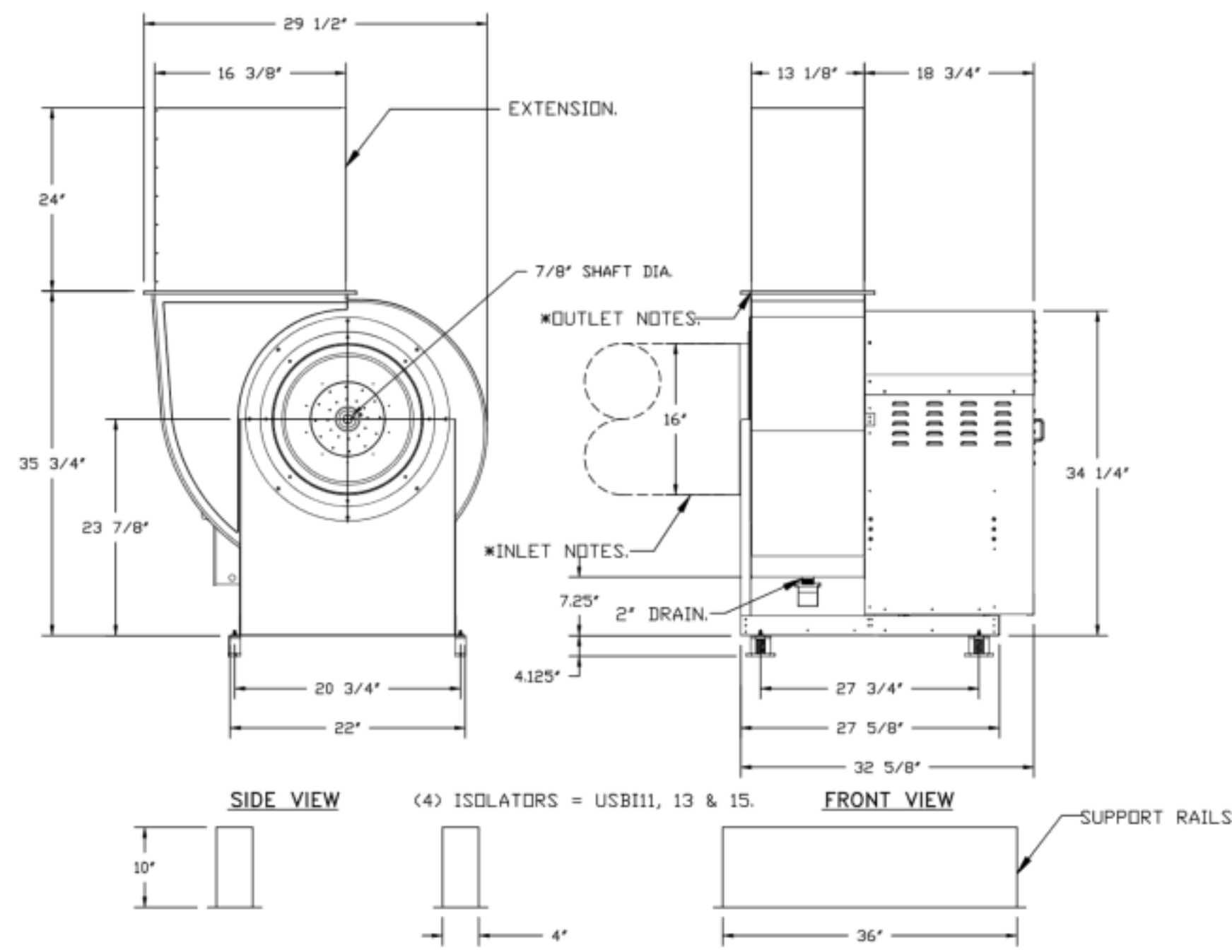


INSTALLATION LOCATION
INSTALL AIR PURIFIER WITH JUNCTION BOX ON OUTSIDE FACE OF ROOFTOP UNIT AND WITH UV LAMP TUBE EXTENDING INTO THE INTERIOR OF THE ROOFTOP UNIT. FIELD VERIFY EXACT LOCATION TO AVOID DAMAGING, TOUCHING, OR INTERFERING WITH ANY RTU INTERIOR COMPONENTS. INSTALLATION LOCATION SHALL BE AS FOLLOWS:
FRANE: INSTALL INTO THE SUPPLY AIR STREAM THROUGH THE REMOVABLE PANEL COVERING THE HORIZONTAL DISCHARGE SUPPLY AIR OPENING.
YORK: INSTALL INTO THE SUPPLY AIR PLENUM FROM THE BACK SIDE OF THE UNIT JUST ABOVE THE HEAT EXCHANGER.

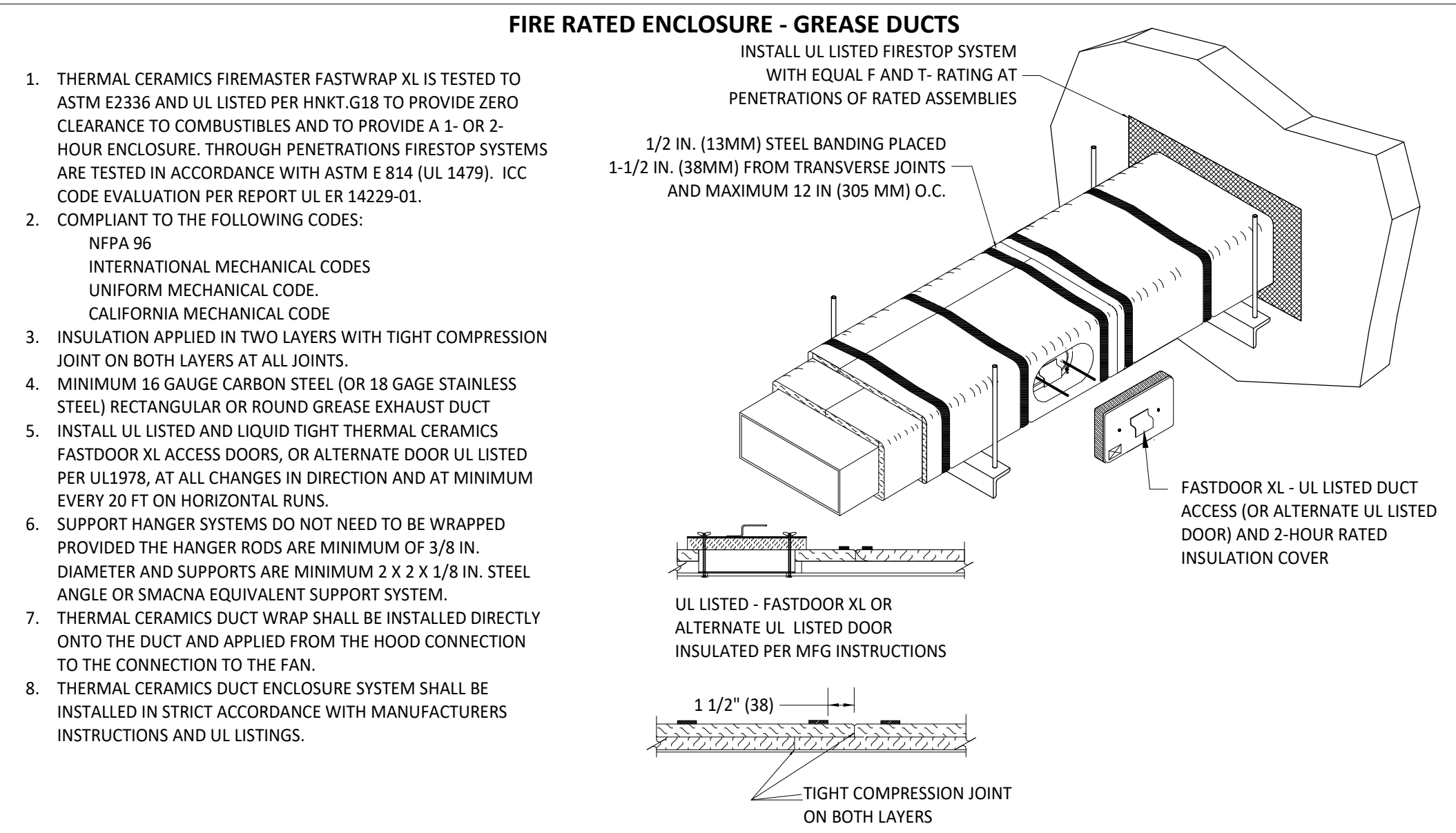
6
M-700.00
UV AIR PURIFIER INSTALLATION
NOT TO SCALE



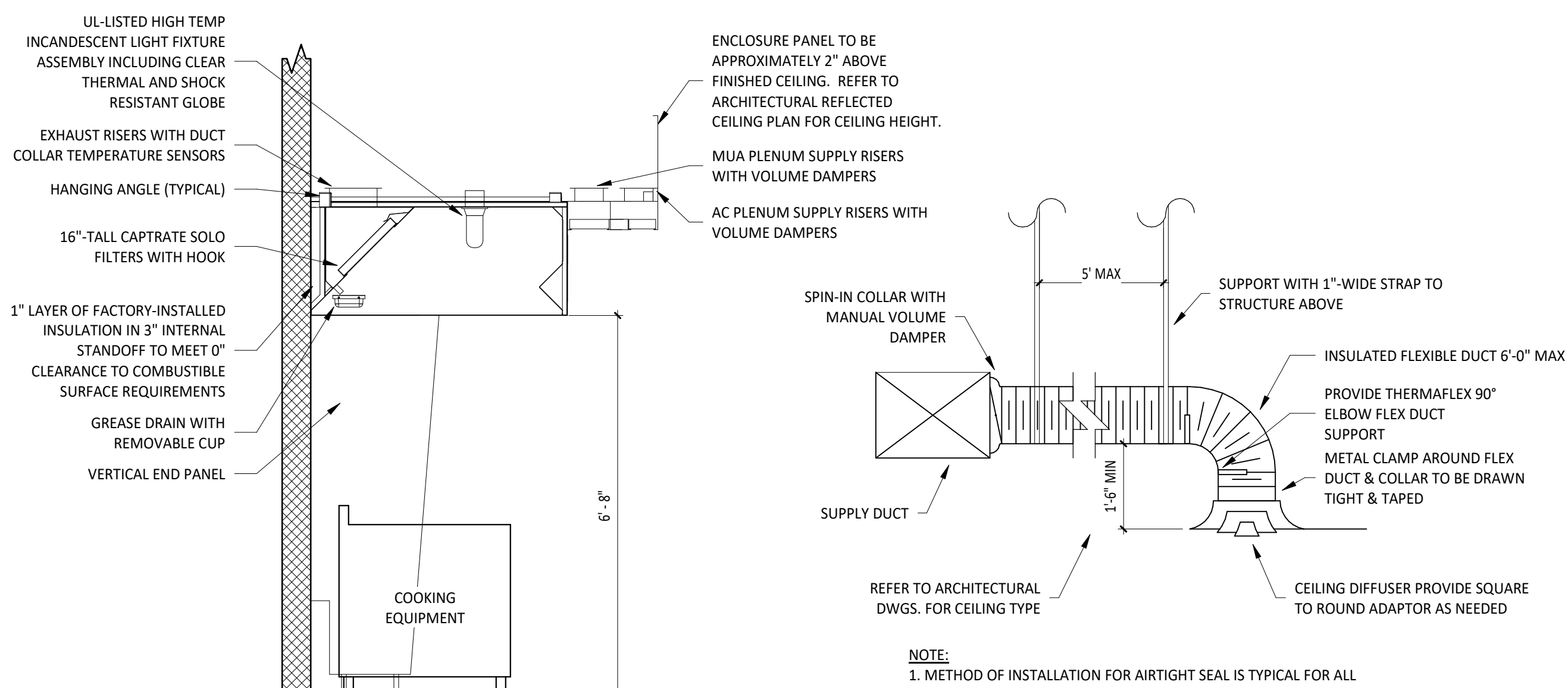
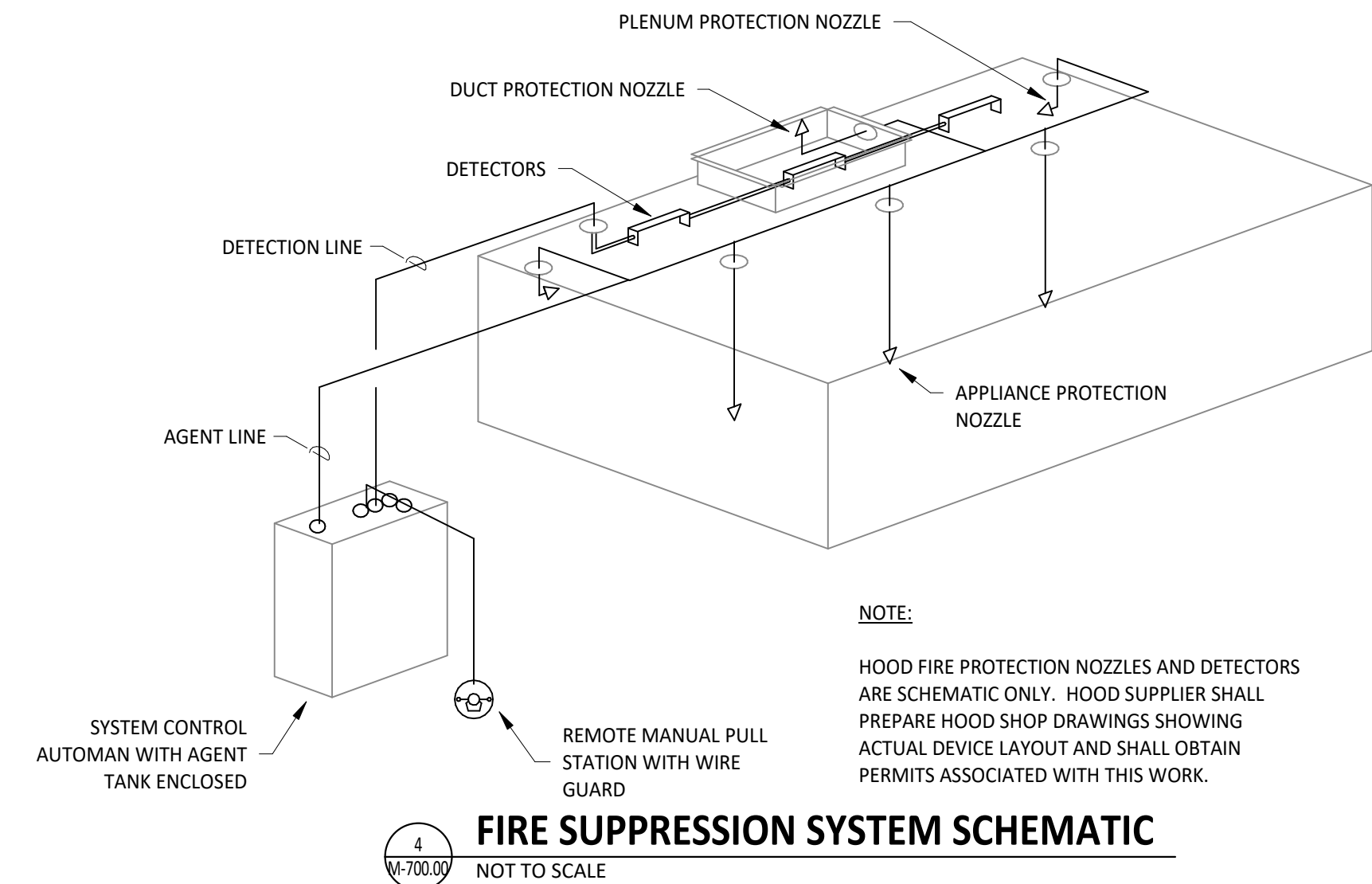
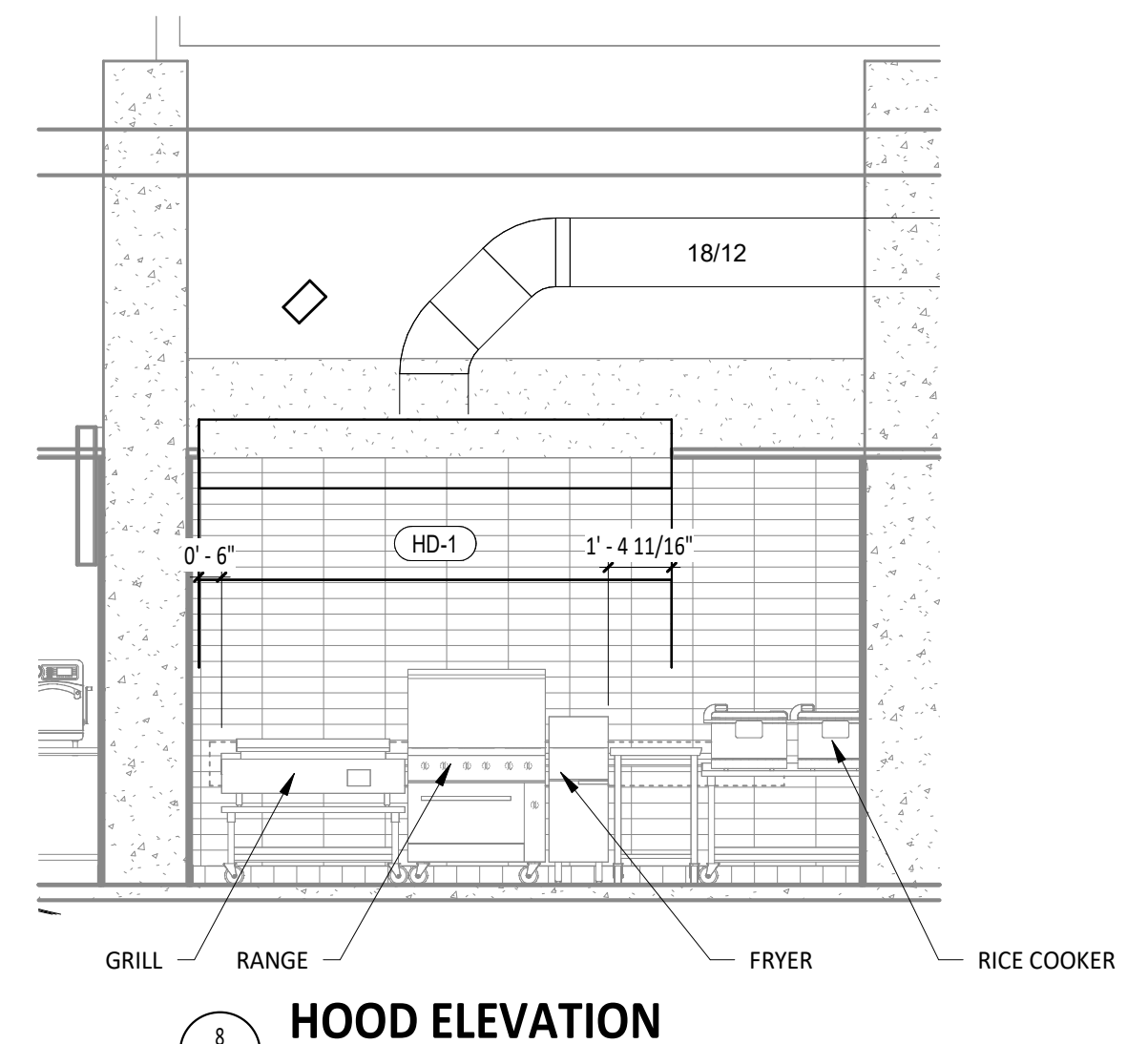
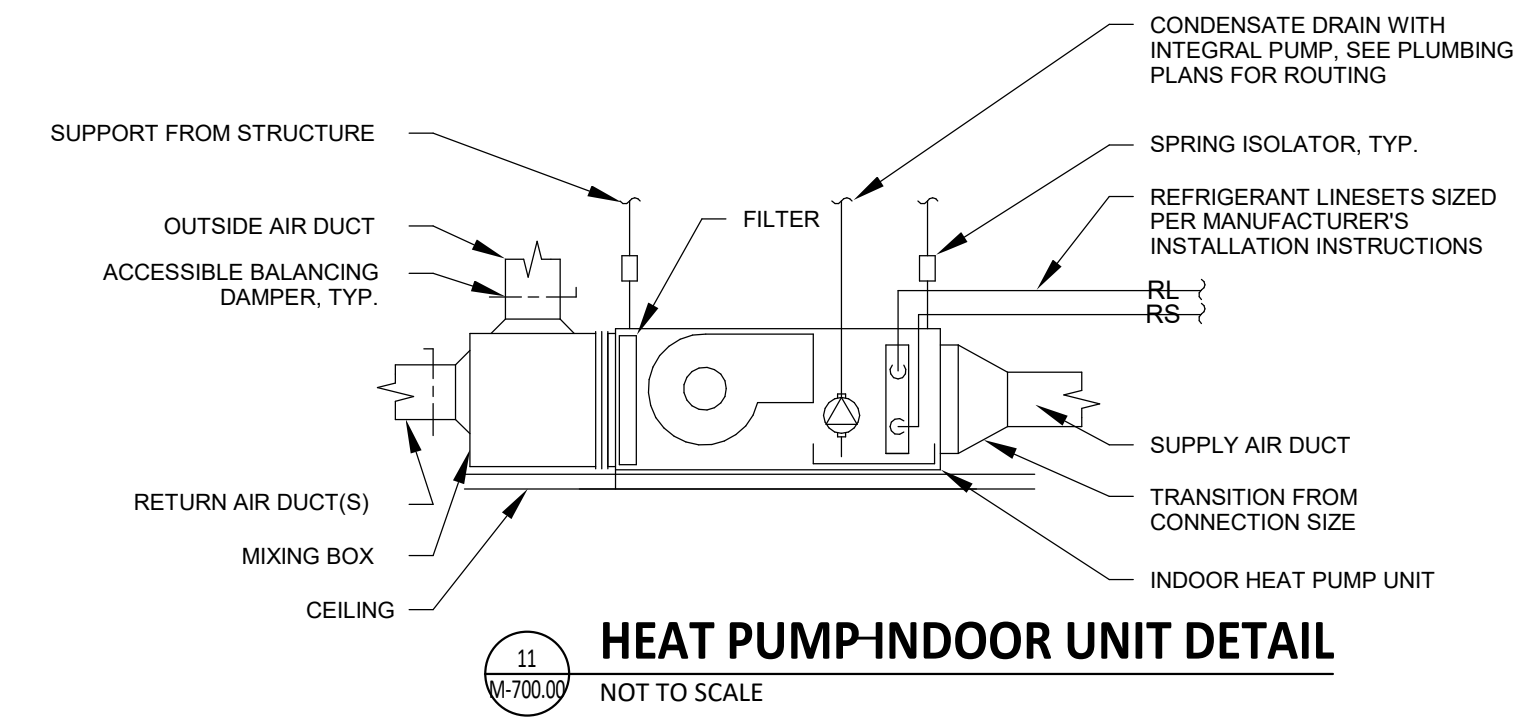
9
M-700.00
HOOD EXHAUST ISOMETRIC
NOT TO SCALE



5
M-700.00
GREASE EXHAUST FAN
NOT TO SCALE



3
M-700.00
FIREMASTER DUCT WRAP - UL HNKT-G18
NOT TO SCALE



| NO. | DATE | REVISION |
|-----|----------|----------------------|
| 5 | | |
| 4 | 04/09/25 | 3 CONSTRUCTION SET |
| 3 | 03/20/25 | 2 UPDATED PERMIT SET |
| 2 | 11/05/24 | 1 BULLETIN 1 |
| 1 | 10/17/24 | 0 PERMIT SET |

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SHEET 4 OF 4
SHEET TITLE:

M-700.00

HVAC DETAILS

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