

**DEMOLITION KEY NOTES**

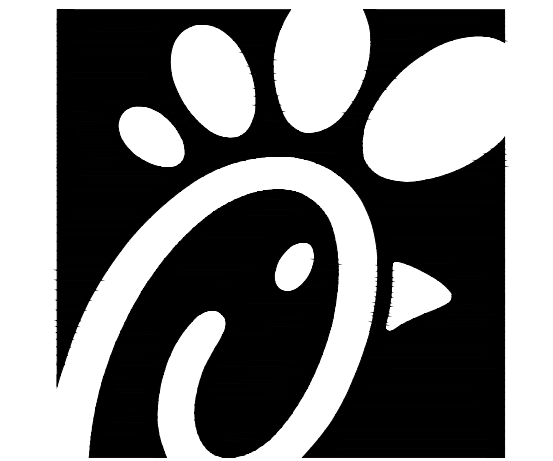
- ① DEMOLISH EXISTING HOOD, ALL ASSOCIATED GREASE DUCT, CAPTURE JET FAN AND DIFFUSER (IF EXISTING), EXHAUST FAN, AND ITS ASSOCIATED ROOF CURB. PATCH AND REPAIR ROOF TO MATCH SURROUNDING CONSTRUCTION.
- ② DEMOLISH EXISTING KITCHEN AC UNIT, UNIT CONTROLS (REMOTE TEMP SENSOR, REMOTE HUMIDITY SENSOR, TSTAT, REMOTE SMOKE DETECTOR TEST/RESET STATION, ETC.), SUPPLY/RETURN AIR DROPS, ALL ASSOCIATED SUPPLY/RETURN DUCT & AIR DEVICES (UNLESS NOTED OTHERWISE). DEMOLISH EXISTING ROOF CURB. PATCH AND REPAIR ROOF TO MATCH SURROUNDING CONSTRUCTION.
- ③ EXISTING REMOTE TEMPERATURE AND/OR REMOTE HUMIDITY SENSORS TO BE REPLACED WITH NEW. DEMOLISH ASSOCIATED CONTROL WIRING. SEE SHEET M11 FOR FURTHER INFORMATION.
- ④ EXISTING AC UNIT TO BE REPLACED WITH NEW AS SCHEDULED ON SHEET M3.1. UNLESS NOTED OTHERWISE, DEMOLISH ALL EXISTING UNIT CONTROLS (REMOTE TEMP. SENSOR, REMOTE HUMIDITY SENSOR, TSTAT, REMOTE SMOKE DETECTOR TEST/RESET STATION, ETC.). EXISTING ROOF CURB AND SUPPLY & RETURN DUCT TO REMAIN. COVER CURB WEATHER-TIGHT FOR RE-USE.
- ⑤ DETACH AND DEMOLISH EXISTING AIR DEVICE. SECURE DUCT ABOVE CEILING GRID FOR RE-CONNECTION. SEE SHEET M11 FOR NEW CONNECTION.

**MECHANICAL DEMOLITION FLOOR PLAN**  
SCALE: 1/4"=1'-0"

| DEMOLITION LEGEND |  |
|-------------------|--|
|                   | EXISTING EQUIPMENT, DUCT, AIR DEVICE ETC. TO REMAIN INTACT |
|                   | EQUIPMENT, DUCT, AIR DEVICE ETC. TO BE DEMOLISHED          |

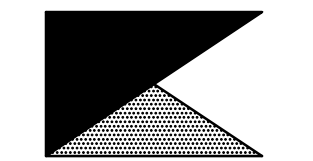
**DEMOLITION NOTES**

- ① CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND PAYING ALL APPLICABLE FEES.
- ② DISPOSAL OF EQUIPMENT AND MATERIALS REQUIRED TO BE REMOVED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING THE WORK.
- ③ DE-ENERGIZE ALL ELECTRICAL CIRCUITS RELATED TO EQUIPMENT THAT WILL BE MOVED OR REMOVED PRIOR TO STARTING WORK. DE-ENERGIZED CIRCUITS SHALL BE PROTECTED WITH LOCKING DEVICES USING APPROPRIATE WARNING LABELS.
- ④ MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ROOF AFTER REMOVAL OF EXISTING MECHANICAL EQUIPMENT. SEE ARCHITECTURAL DRAWINGS FOR ROOF PATCHING REQUIREMENTS.
- ⑤ EXCEPT WHERE NOTED, EXISTING REMOTE TEMPERATURE &/OR HUMIDITY SENSORS TO REMAIN. IF DURING RENOVATION PURPOSES CONTROLS SHALL BE TAKEN DOWN, MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REINSTALLING AND TO PROVIDE ANY ADDITIONAL WIRING NEEDED. VERIFY EXISTING UNIT CONTROLS ARE IN GOOD WORKING ORDER. IF NOT, CONTACT CHICK-FIL-A CONSTRUCTION MANAGER.
- ⑥ MECHANICAL CONTRACTOR SHALL REPLACE FILTERS FOR ALL RTUS AT END OF PROJECT AND PRIOR TO REOPENING. MC TO PROVIDE PROPOSAL TO FACILITIES MANAGER, CONSTRUCTION MANAGER, AND OPERATOR TO CORRECT EXISTING RTU PUNCH ITEMS IDENTIFIED BY HALTON.
- ⑦ CONTRACTOR SHALL INDICATE SALVAGE VALUE IN BID FOR ROOFTOP UNITS BEING REPLACED.

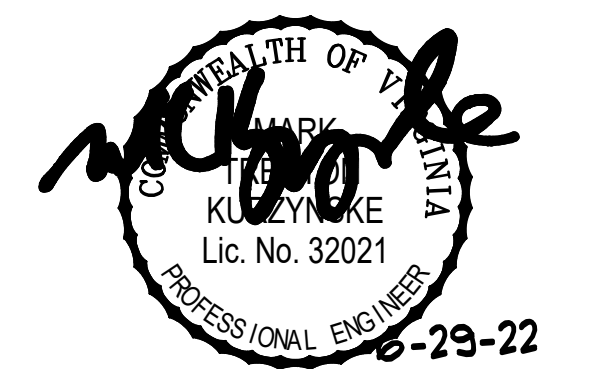


Chick-fil-A

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**CHICK-FIL-A**  
**CENTRAL PARK**  
1698 CARL D SILVER PKWY  
FREDERICKSBURG, VA 22401-4924

**FSR#01634**

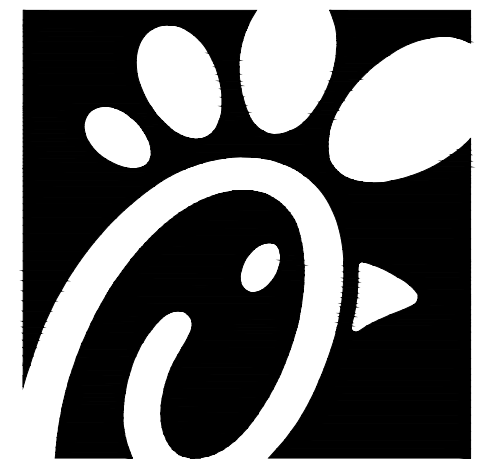
BUILDING TYPE / SIZE: S04-152  
RELEASE: 21.05

| REVISION SCHEDULE |          |                                |
|-------------------|----------|--------------------------------|
| NO.               | DATE     | DESCRIPTION                    |
| 1                 | 01/21/22 | Gov't Comments                 |
| 3                 | 05/28/22 | Operator Comments/Coordination |

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SHEET  
MECHANICAL  
DEMO PLAN  
SHEET NUMBER

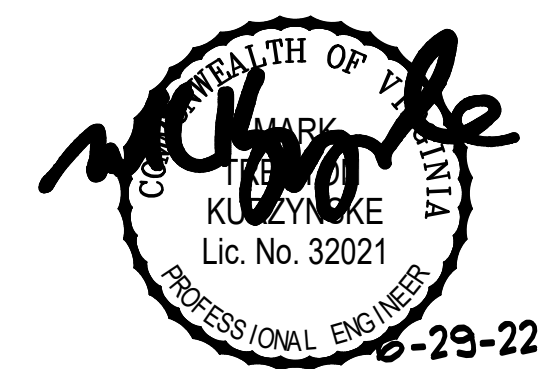
**M0.1**



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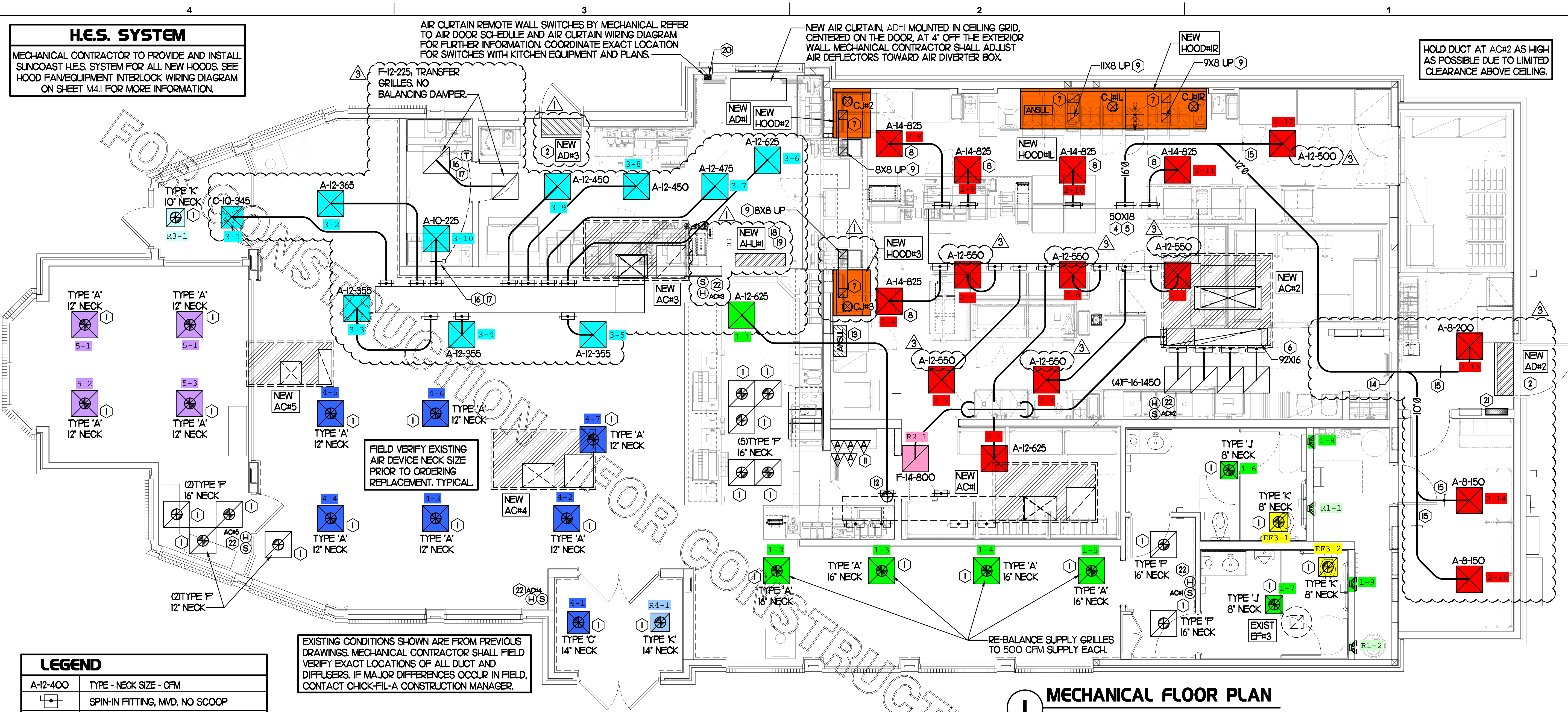
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|                          |          |                                |
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 SHEET MECHANICAL FLOOR PLAN  
 SHEET NUMBER

**M1.1**



**H.E.S. SYSTEM**  
 MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL SUNCOAST H.E.S. SYSTEM FOR ALL NEW HOODS. SEE HOOD FAN/EQUIPMENT INTERLOCK WIRING DIAGRAM ON SHEET M4.I FOR MORE INFORMATION.

AIR CURTAIN REMOTE WALL SWITCHES BY MECHANICAL. REFER TO AIR DOOR SCHEDULE AND AIR CURTAIN WIRING DIAGRAM FOR FURTHER INFORMATION. COORDINATE EXACT LOCATION FOR SWITCHES WITH KITCHEN EQUIPMENT AND PLANS.

NEW AIR CURTAIN, AD#1 MOUNTED IN CEILING GRID, CENTERED ON THE DOOR, AT 4" OFF THE EXTERIOR WALL. MECHANICAL CONTRACTOR SHALL ADJUST AIR DEFLECTORS TOWARD AIR DIVERTER BOX.

HOLD DUCT AT AC#2 AS HIGH AS POSSIBLE DUE TO LIMITED CLEARANCE ABOVE CEILING.

FIELD VERIFY EXISTING AIR DEVICE NECK SIZE PRIOR TO ORDERING REPLACEMENT. TYPICAL.

EXISTING CONDITIONS SHOWN ARE FROM PREVIOUS DRAWINGS. MECHANICAL CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS OF ALL DUCT AND DIFFUSERS. IF MAJOR DIFFERENCES OCCUR IN FIELD, CONTACT CHICK-FIL-A CONSTRUCTION MANAGER.

**MECHANICAL FLOOR PLAN**  
 SCALE: 1/4"=1'-0"

**LEGEND**

|          |                                   |
|----------|-----------------------------------|
| A-12-400 | TYPE - NECK SIZE - CFM            |
| [Symbol] | SPIN-IN FITTING, MVD, NO SCOOP    |
| [Symbol] | REMOTE TEMPERATURE SENSOR         |
| [Symbol] | REMOTE HUMIDITY SENSOR            |
| [Symbol] | SMOKE DETECTOR                    |
| [Symbol] | GREASE ACCESS DOOR TYPE           |
| [Symbol] | DIRECTION OF THROW                |
| [Symbol] | KEY NOTE REFERENCE                |
| [Symbol] | EXISTING START COLLAR             |
| [Symbol] | EXISTING RUNNOUT TO REMAIN        |
| [Symbol] | EXISTING RETURN/EXHAUST (TYP)     |
| [Symbol] | EXISTING SUPPLY DIFFUSER (TYP)    |
| [Symbol] | NEW RETURN/EXHAUST, UNO. (TYP)    |
| [Symbol] | NEW SUPPLY DIFFUSER, UNO. (TYP)   |
| [Symbol] | NEW DUCT (TYP)                    |
| [Symbol] | SMOKE DETECTOR TEST/RESET STATION |

**SHEET NOTES**

- DUCT SIZES SERVING DIFFUSERS AND GRILLES ARE SAME SIZE AS DIFFUSER OR GRILLE NECK UNLESS NOTED OTHERWISE.
- REFER TO ELEVATIONS ON M2.I AND HOOD DETAILS ON M.H.I FOR CAPTURE-JET FANS DUCTING REQUIREMENTS.
- HARDPIPE SHALL BE USED FOR ALL TAKE-OFFS EXCEPT WHERE ALLOWED BY DETAIL I/M.3.I. USE OF FLEXIBLE DUCT SHALL BE LIMITED TO THOSE SITUATIONS WHERE NO OTHER MEANS TO ACCOMPLISH ROUTING IS POSSIBLE.
- COORDINATE NEW WORK WITH EXISTING CONDUITS, STRUCTURE AND PIPING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR TO NOTIFY DESIGN TEAM WITHOUT DELAY IF ACTUAL LOCATION OF EXISTING MECHANICAL EQUIPMENT DOES NOT MATCH FLOOR PLAN.
- MECHANICAL CONTRACTOR SHALL BALANCE HVAC SYSTEM AS SHOWN ON THIS PLAN & IN SCHEDULES ON SHEET M3.I. IF AIRFLOWS DIFFER BY MORE THAN 5%, CONTACT CFA CONSTRUCTION MANAGER. TEST AND BALANCE REPORT SHALL BE DONE PRIOR TO STORE TURNOVER AND SUBMITTED TO CFA'S CONSTRUCTION MANAGER.

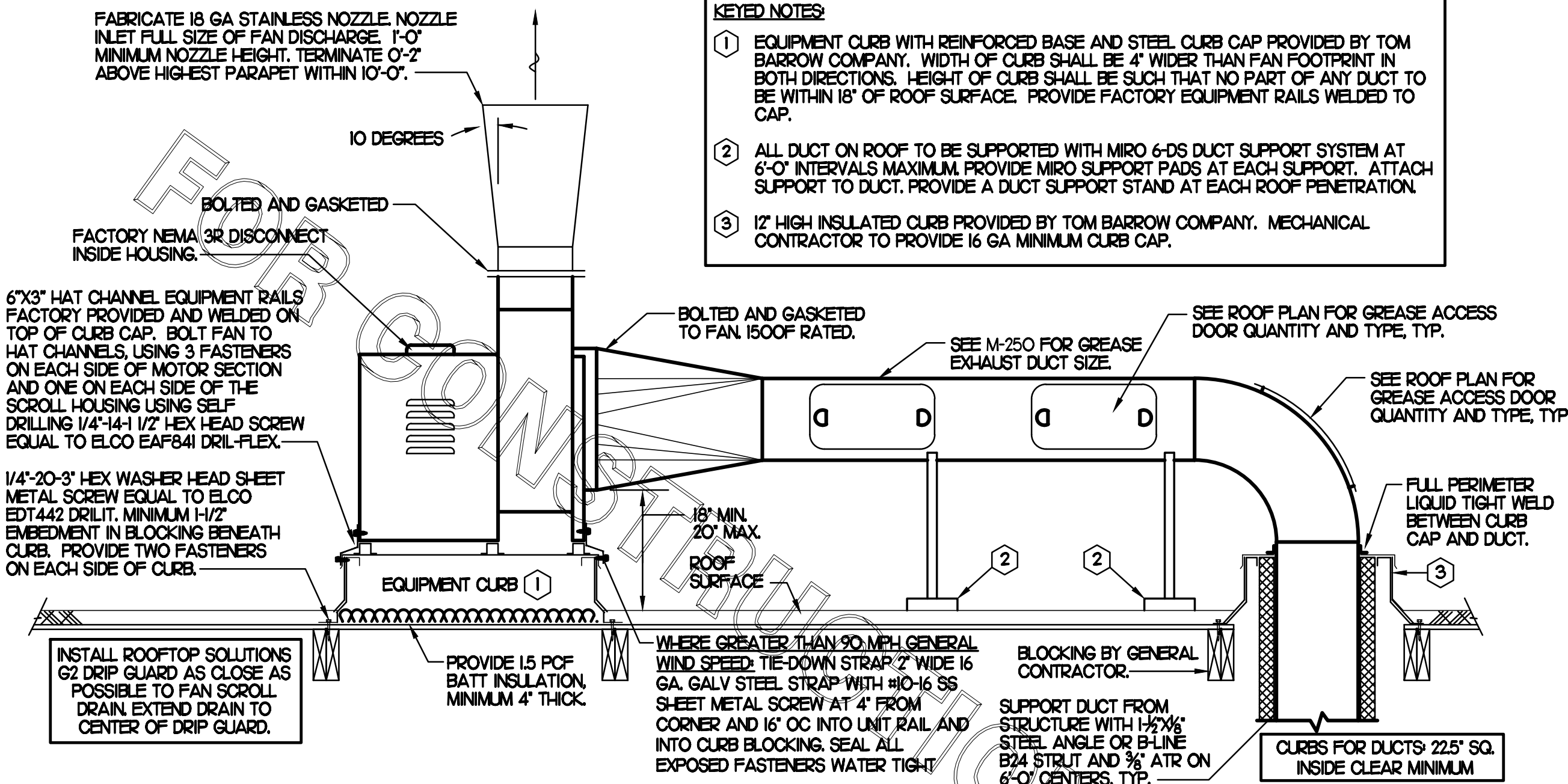
**KEY NOTES (THIS SHEET ONLY)**

- CONNECT NEW AIR DEVICE TO EXISTING TAKE-OFF. IF NECESSARY, MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL NEW DUCT IN ORDER TO MAKE CONNECTION TO AIR DEVICE IN NEW LOCATION. ANY FLEX DUCT USED SHALL NOT BE LONGER THAN 4'-0". SEE DETAIL I/M.3.I. COORDINATE AIR DEVICE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN.
- AIR CURTAIN MOUNTED OVER DOOR HEADER AT 7'-2" AFF TO BOTTOM OF UNIT. PROVIDE BLOCKING IN WALL BEHIND AIR CURTAIN. USE FACTORY PRE-PUNCHED MOUNTING HOLES ON BACK SIDE OF AIR CURTAIN ONLY. ATTACH AIR CURTAIN TO WALL USING 3/8" LAG BOLTS, LENGTH AS REQUIRED TO FULLY PENETRATE BLOCKING. LOCATE MAGNETIC CONTACT TYPE MICROSWITCH IN DOOR FRAME ON STRIKE SIDE.
- NOT USED.
- BRANCH TAKE-OFFS SHALL NOT BE LOCATED CLOSER THAN 3'-0" FROM ANY ELBOW INCLUDING THE SUPPLY AIR DROP FROM CURB.
- TRANSITION IN VERTICAL DROP FROM FULL SIZE OF CURB OPENING TO SIZE SHOWN. TRANSITION WITHIN CURB WHERE REQUIRED TO AVOID STRUCTURE. PROVIDE TURNING VANES IN ELBOWS, INCLUDING THE SUPPLY AIR DROP FROM UNIT.
- TRANSITION IN VERTICAL DROP FROM FULL SIZE OF CURB OPENING TO SIZE SHOWN. TRANSITION WITHIN CURB WHERE REQUIRED TO AVOID STRUCTURE. NO TURNING VANES IN ELBOW.
- HALTON MBD DAMPER AT HOOD COLLAR BY MECHANICAL CONTRACTOR. REFER TO SHEET M2.I AND M.H.I FOR FURTHER INFORMATION.
- MECHANICAL CONTRACTOR TO ADJUST PATTERN DEFLECTORS TO THROW STRAIGHT DOWN.
- GREASE DUCT UP THRU ROOF FROM FULL SIZE OF MBD COLLAR. OFFSETS THRU ROOF NOT TO BE GREATER THAN 45 DEGREES. SEE SHEET M.I.2 FOR CONTINUATION.
- NOT USED.
- MOUNT NEW SMOKE DETECTOR TEST/RESET STATIONS FOR ALL A/C UNITS ON WALL. CONTACT SUNCOAST ENVIRONMENTAL CONTROLS AT 1-877-544-6679 TO PURCHASE A NEW SMOKE DETECTOR TEST/RESET STATIONS FOR EACH RTU. COORDINATE WITH ELECTRICAL AND KITCHEN PLANS FOR EXACT LOCATION.
- PROVIDE & INSTALL NEW SPIN-IN COLLAR AND ROUTE NEW DUCT TO NEW GRILLE AS SHOWN.
- ANSUL UTILITY CABINET. LOCATE TOP OF CABINET 0'-2" BELOW CEILING. COORDINATE FINAL MOUNTING LOCATION WITH KITCHEN EQUIPMENT.
- ROUTE DUCT BETWEEN WALL STUDS ABOVE CEILING. COORDINATE WITH ARCH AND STRUCTURAL FOR EXACT LOCATION. USE 1" WRAP AT WALL PENETRATION.
- RUSKIN MODEL MDRS25 OR EQUIVALENT MANUAL VOLUME DAMPER WITH LOCKING QUADRANT HANDLE.

- YOUNG REGULATOR 10" MODEL 2010 ROUND ZONE DAMPER WITH MODEL T-312CE AUTOMATIC CHANGEOVER THERMOSTAT. MOUNT TSTAT AT 4'-0" AFF. POWER OPEN/SRING CLOSE. ADJUST MECHANICAL LIMIT FOR 50 CFM MINIMUM AIRFLOW. CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARROW COMPANY FOR THE ZONE DAMPER. THE MECHANICAL CONTRACTOR SHALL PURCHASE THE ZONE DAMPER DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0101, FOR PRICING AND AVAILABILITY. ZONE DAMPERS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.
- PROVIDE 120V/24V 50 VA TRANSFORMER TO SERVE YOUNG REGULATOR ZONE DAMPER ACTUATOR AND THERMOSTAT. POWER TRANSFORMER FROM 120V POWER CIRCUIT THAT REMAINS LIVE 24/7. PROVIDE ALL NECESSARY WIRING AND COMPONENTS TO MAKE CONTROL AND POWER CONNECTIONS TO TRANSFORMER, ZONE DAMPER, AND THERMOSTAT PER MANUFACTURER'S IOM. SEE DETAIL ON SHEET M4.I FOR MORE INFORMATION.
- MOUNT AIR HANDLER ON OVERHEAD WALL ABOVE CASED OPENING. MOUNT UNIT AT 12" ABOVE CASED OPENING. ROUTE REFRIGERANT PIPING ABOVE CEILING AND UP THRU ROOF TO CONDENSING UNIT, CU#1. SEE SHEET M.I.2 FOR CONDENSING UNIT LOCATION. REFRIGERANT PIPING BELOW ROOF SHALL BE HIDDEN WITHIN WALLS AND CEILINGS.
- ROUTE CONDENSATE FROM ALU#1 UP THRU ROOF TO CONNECT INTO CONDENSATE LINE. FIELD VERIFY EXACT LOCATION OF CONDENSATE LINE ON ROOF. CONDENSATE PIPING SHALL BE TYPE K COPPER CONDENSATE PIPING BELOW ROOF DECK SHALL HAVE 1/2" ARMAFLEX INSULATION. PROVIDE PRE-FAB PIPE CURB FOR PENETRATION THRU ROOF. CONDENSATE MUST SLOPE MIN. 1/8" PER FOOT TO TERMINATE POINT. CONTRACTOR SHALL INSTALL A CONDENSATE LIFT PUMP IN ORDER TO ROUTE CONDENSATE ABOVE ROOF.
- MOUNT AH-U#1 THERMOSTAT ON WALL NEXT TO AD#1 REMOTE WALL SWITCHES. SEE SCHEDULE ON SHEET M3.I FOR INTERLOCK WITH T500 PANEL.
- ELECTRICAL CONTRACTOR TO PURCHASE AND INSTALL NEW CFA T500 TEMP CONTROL PANEL WITH AUTOMATIC TIMER FOR LIGHTING CONTROLS AND 6-THERMOSTAT TEMP CONTROL CABINET. COORDINATE WITH ELECTRICAL CONTRACTOR FOR NEW LOCATION OF TEMP CONTROL CABINET. CONTROL WIRING TERMINATIONS BETWEEN NEW THERMOSTATS, NEW SENSORS, AND NEW/EXISTING RTUS BY MECHANICAL CONTRACTOR. REFER TO WIRING DIAGRAM ON SHEET M4.I.
- MOUNT NEW REMOTE TEMP SENSOR AND NEW LENNOX HUMIDITY SENSOR FOR ROOFTOP UNIT AS NOTED BELOW (OR ABOVE WAINSCOTING IF APPLICABLE). ROUTE NEW WIRING FOR NEW REMOTE TEMP SENSOR TO NEW TSTAT IN CFA T500 PANEL. ROUTE NEW WIRING FOR NEW LENNOX HUMIDITY SENSOR TO UNIT ON ROOF. REFER TO WIRING DIAGRAM ON SHEET M4.I.
  - AC#1: MOUNT NEW REMOTE TEMP SENSOR ON WALL AT 5'-8" AFF. COORDINATE FINAL MOUNTING LOCATION IN FIELD WITH KITCHEN EQUIPMENT, SHELVING, AND ELECTRICAL. MOUNT NEW LENNOX HUMIDITY SENSOR DIRECTLY ABOVE CEILING. TEMP SENSOR.
  - AC#2 & AC#3: MOUNT NEW REMOTE TEMP SENSOR ON WALL AT 5'-0" AFF. MOUNT NEW LENNOX HUMIDITY SENSOR DIRECTLY ABOVE REMOTE TEMP SENSOR.
  - AC#4 & AC#5: MOUNT NEW SENSORS IN THE SAME LOCATION AS DEMOLISHED SENSORS.

**TOTAL AIR BALANCE SCHEDULE**

| EQUIPMENT MARK  | AC#1 (NEW)   | AC#2 (NEW) | AC#3 (NEW)  | AC#4 (NEW)  | AC#5 (NEW) | EF#1 (NEW)     | EF#2 (NEW)    | EF#3 (EXIST) | TOTAL  |
|-----------------|--|------------|-------------|-------------|------------|----------------|---------------|--------------|--------|
| SERVES          | SIDE DINING  | KITCHEN    | MAIN DINING | MAIN DINING | PLAY AREA  | HOOD#1 HOOD#1R | HOOD#2 HOOD#3 | REST-ROOMS   |        |
| SUPPLY AIR CFM  | 3,150  | 8,500      | 4,000       | 2,750       | 2,000      |                |               |              | 20,400 |
| RETURN AIR CFM  | 2,400  | 6,600      | 3,000       | 2,150       | 1,700      |                |               |              | 15,850 |
| OUTSIDE AIR CFM | 750  | 1,900      | 1,000       | 600         | 300        |                |               |              | +4,550 |
| EXHAUST CFM     |  |            |             |             |            | 1,912          | 1,402         | 500          | -3,814 |
| PRESSURIZATION  |  |            |             |             |            |                |               |              | +736   |
| REMARKS         | ADJUST AND VERIFY BALANCE OF ALL HVAC EQUIPMENT IS AS SHOWN IN ORDER TO MAINTAIN BUILDING AIR BALANCE. |            |             |             |            |                |               |              |        |



- KEYED NOTES**
- EQUIPMENT CURB WITH REINFORCED BASE AND STEEL CURB CAP PROVIDED BY TOM BARROW COMPANY. WIDTH OF CURB SHALL BE 4" WIDER THAN FAN FOOTPRINT IN BOTH DIRECTIONS. HEIGHT OF CURB SHALL BE SUCH THAT NO PART OF ANY DUCT TO BE WITHIN 18" OF ROOF SURFACE. PROVIDE FACTORY EQUIPMENT RAILS WELDED TO CAP.
  - ALL DUCT ON ROOF TO BE SUPPORTED WITH MIRO 6-DS DUCT SUPPORT SYSTEM AT 6'-0" INTERVALS MAXIMUM. PROVIDE MIRO SUPPORT PADS AT EACH SUPPORT. ATTACH SUPPORT TO DUCT. PROVIDE A DUCT SUPPORT STAND AT EACH ROOF PENETRATION.
  - 12" HIGH INSULATED CURB PROVIDED BY TOM BARROW COMPANY. MECHANICAL CONTRACTOR TO PROVIDE 16 GA MINIMUM CURB CAP.

**2 KITCHEN HOOD EXHAUST FAN - UTILITY SET FAN**  
NO SCALE

SET CONDENSING UNIT ON ROOF USING TWO CURBS PLUS OPES-1 EQUIPMENT CURBS. SECURE CONDENSING UNIT TO CURBS ARRANGED IN PARALLEL. SET LONG SIDE OF CURB PARALLEL TO ROOF SLOPE. FLASH INTO ROOF BY GC. COORDINATE EXACT LOCATION WITH STRUCTURAL DRAWINGS. ALL MAINTENANCE CLEARANCES OF NEW AND EXISTING EQUIPMENT SHALL BE MAINTAINED.

**SHEET NOTES**

- ALL DUCTWORK AND UNFINISHED METAL ON ROOF EXCEPT STAINLESS SHALL BE PREPARED WITH TWO COATS OF SHERWIN WILLIAMS B66-200 SERIES DTM WHITE ACRYLIC SEMI-GLOSS INDUSTRIAL MAINTENANCE COATING, DEGREASE AND PRIME BARE METAL SURFACE WITH ONE COAT OF SHERWIN WILLIAMS DTM PRIMER PRIOR TO PAINTING.
- AT EACH PIECE OF ROOF EQUIPMENT, PROVIDE A PLASTIC ENGRAVED LABEL WITH 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND. THE LABEL IS TO HAVE A SELF ADHESIVE BACKING.
- MAINTAIN 18" CLEARANCE FROM GREASE EXHAUST DUCTWORK ABOVE ROOF TO ANY COMBUSTIBLE CONSTRUCTION INCLUDING PARAPET WALLS.

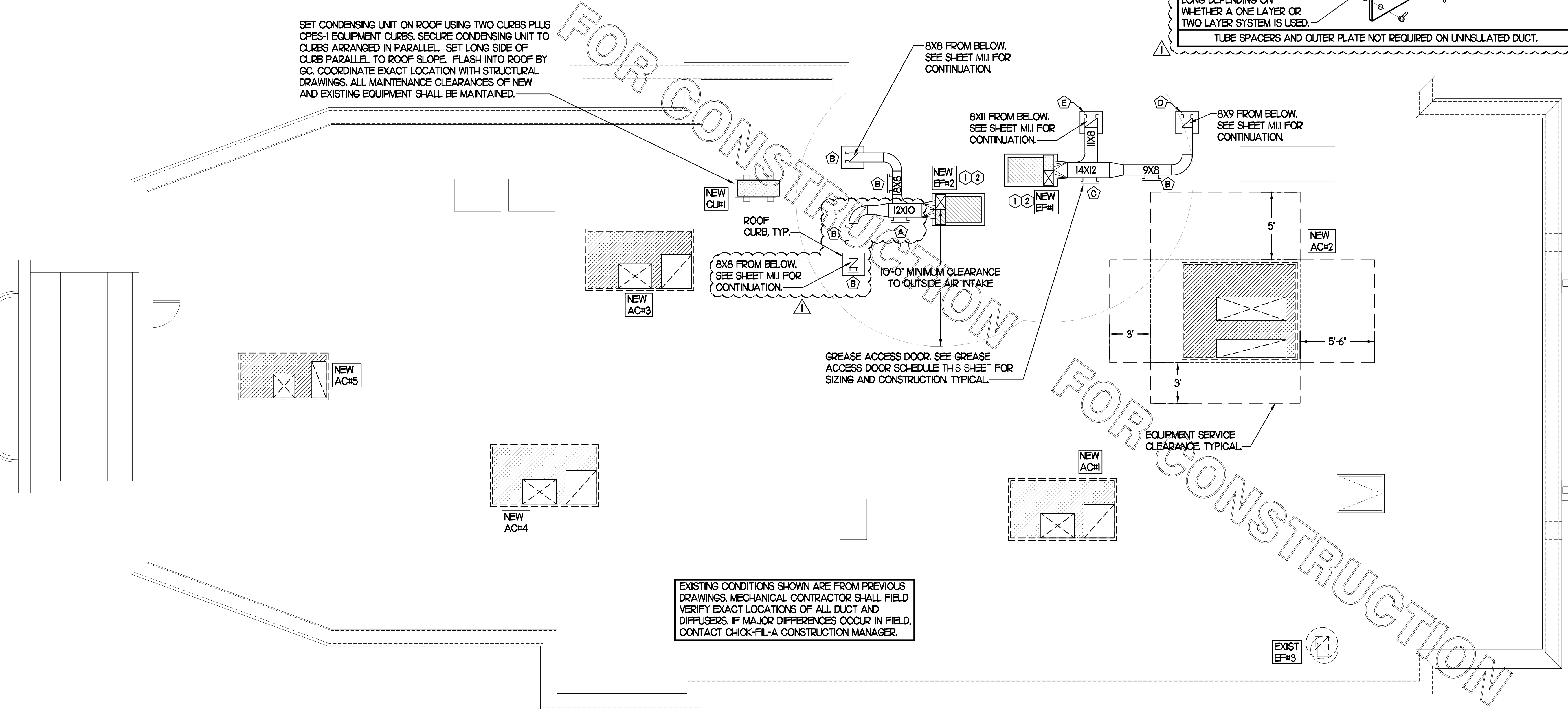
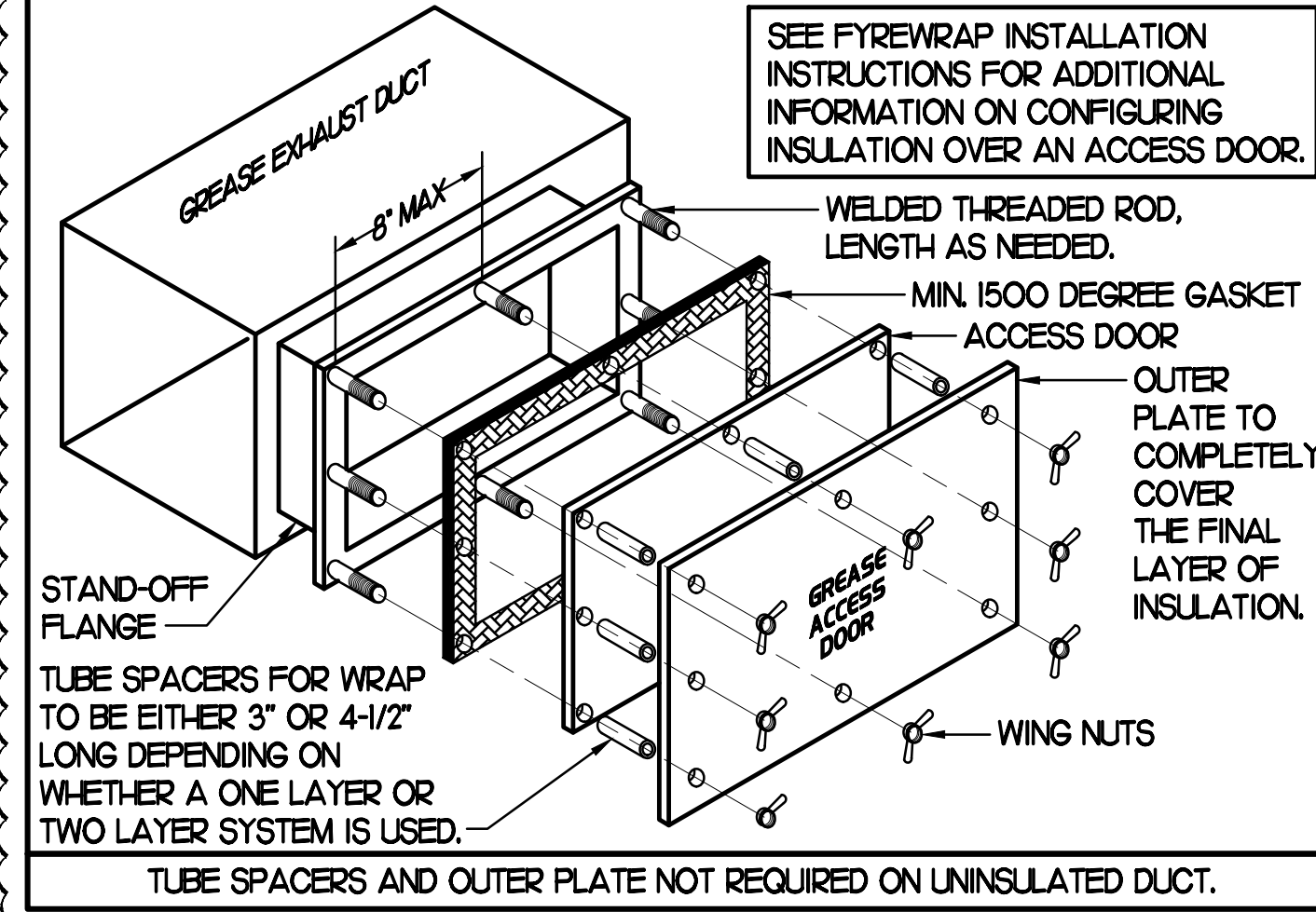
**KEY NOTES**

- FABRICATE DISCHARGE AIR NOZZLE. LOCATE EXHAUST TERMINATION A MINIMUM 10'-0" FROM OUTSIDE AIR INTAKES. SEE DETAIL 2 THIS SHEET.
- GREASE EXHAUST DUCT LOCATED ON ROOF SHALL SLOPE 1/4" PER FOOT TOWARDS THE HOOD, THE FAN, OR A COMBINATION OF THE TWO SUCH THAT NO PORTION OF THE RADIUS ELBOW AT THE CURB IS BELOW THE CURB CAP AND SUCH THAT THE FAN BASE SETS DIRECTLY ON THE CURB RAILS. THE BOTTOM OF THE RADIUS ELBOW MAY BE EVEN FLUSH WITH THE CURB CAP, BUT NOT BELOW THE CAP. THE DUCT AT THE FAN MUST BE CENTERED ON THE FAN INLET. THE MC MAY ADD A VERTICAL RISER AT THE RADIUS ELBOW LOCATED AT THE DUCT CURB AS NEEDED IN ORDER TO CENTER THE DUCT ON THE FAN INLET.

**GREASE ACCESS DOOR SCHEDULE**

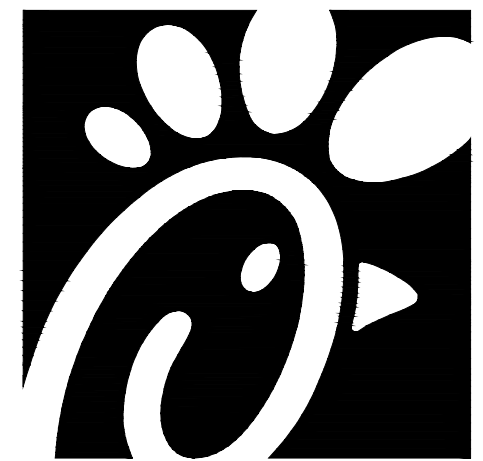
| MARK | OPENING SIZE | DOOR SIZE   | REMARKS |
|------|--------------|-------------|---------|
| A    | 7.5H X 14W   | 9.5H X 16W  | I       |
| B    | 5.5H X 14W   | 7.5H X 16W  | I       |
| C    | 9.5H X 14W   | 11.5H X 16W | I       |
| D    | 6.5H X 14W   | 8.5H X 16W  | I       |
| E    | 8.5H X 14W   | 10.5H X 16W | I       |

1. ACCESS DOORS SHALL BE UL 1978 LISTED OR FIELD FABRICATED, REQUIRE NO TOOLS FOR REMOVAL AND MEET THE REQUIREMENTS OF THE CURRENT EDITION OF THE IMC. ACCESS DOOR ASSEMBLY SHALL BE WELDED IN PLACE TO THE GREASE EXHAUST DUCT AND THE ACCESS DOOR SHALL BE SECURED WITH T-LUMB SCREWS. ACCESS DOORS SHALL BE SEALED WITH A MINIMUM 1500 DEGREE GASKET MATERIAL EQUIVALENT TO THAT MANUFACTURED BY BRETON INDUSTRIES, INC (800) 382-2491.



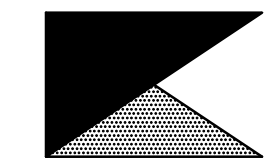
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**1 MECHANICAL ROOF PLAN**  
SCALE: 1/4"=1'-0"

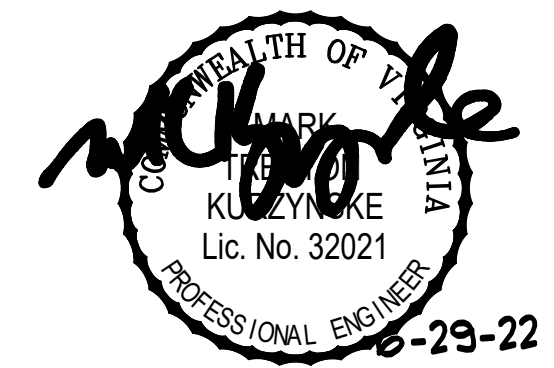


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**CHICK-FIL-A**  
**CENTRAL PARK**  
1698 CARL D SILVER PKWY  
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**FSR#01634**  
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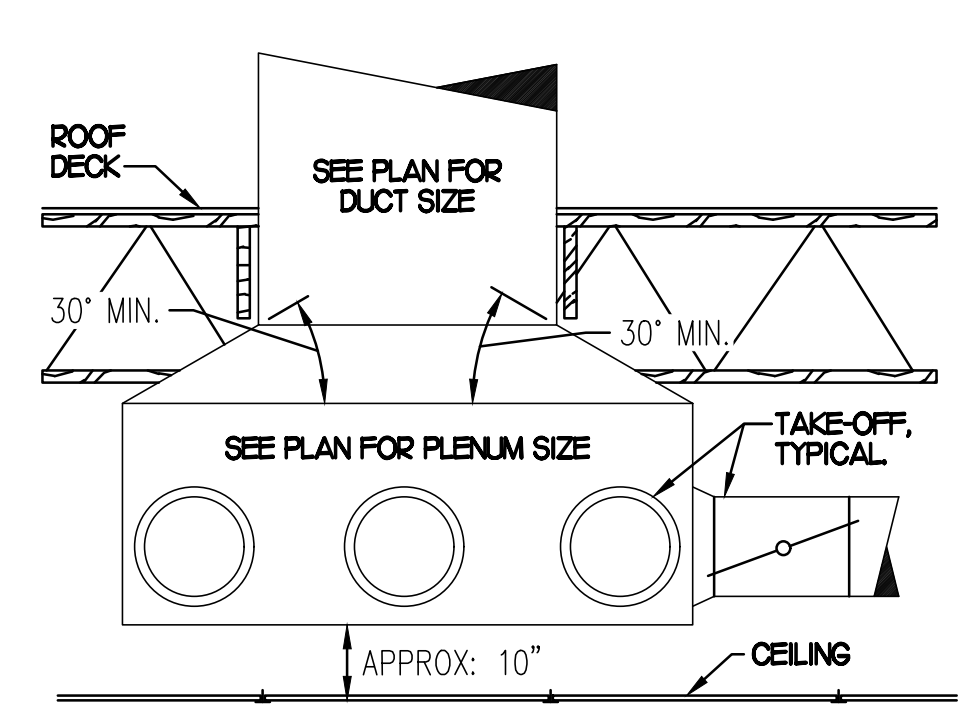
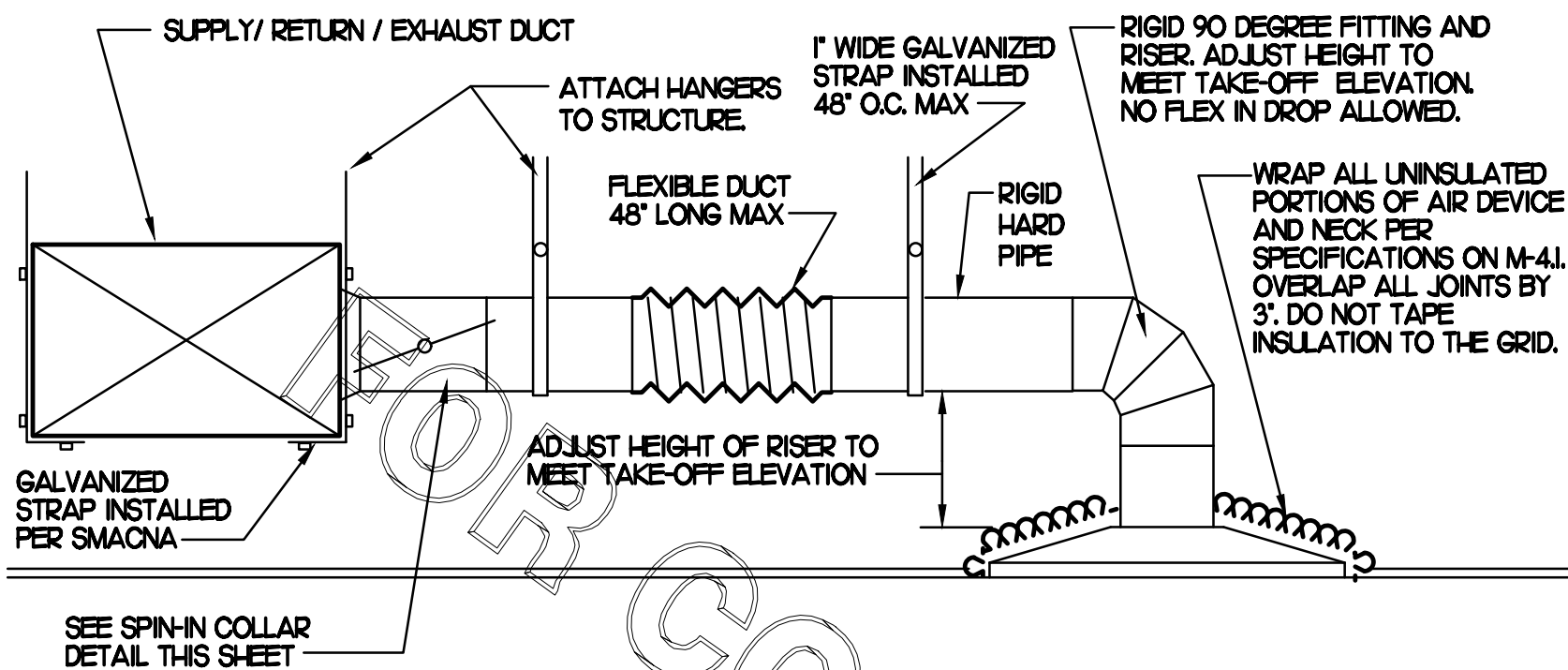
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SHEET  
MECHANICAL  
ROOF PLAN  
SHEET NUMBER

**M1.2**





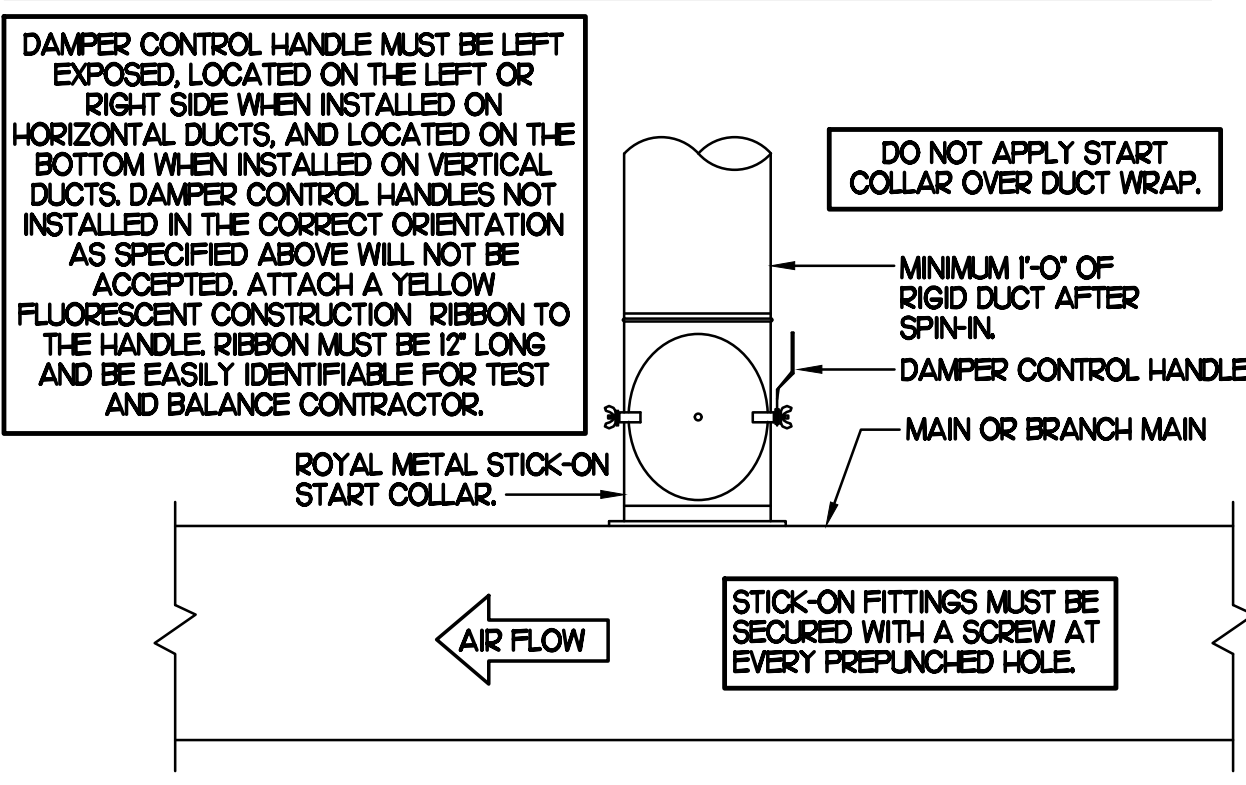
### AIR DOOR SCHEDULE

| MARK       | CFM   | VELOCITY | HEATING CAP | HP  | AREA SERVED     | MODEL    | MANUFACTURER | REMARKS |
|------------|-------|----------|-------------|-----|-----------------|----------|--------------|---------|
| AD#1 (NEW) | 1543  | 2338     | 10 KW       | 3/4 | DRIVE THRU      | CHA-48ED | POWERED-AIRE | 2-5     |
| AD#2 (NEW) | 3,867 | 4,220    | NA          | 3/4 | REAR DOOR       | RBT-48   | POWERED-AIRE | 1       |
| AD#3 (NEW) | 2,899 | 4,220    | NA          | 3/4 | DRIVE THRU DOOR | RBT-36   | POWERED-AIRE | 1       |

NOTES: CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARRON COMPANY FOR THE AIR DOORS. THE MECHANICAL CONTRACTOR SHALL PURCHASE THE AIR DOORS DIRECTLY FROM TOM BARRON COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100 FOR PRICING AND AVAILABILITY. AIR DOORS NOT PURCHASED THRU TOM BARRON COMPANY WILL NOT BE ACCEPTED.

REMARKS: 1. FACTORY PROVIDED MAGNETIC DOOR CONTACT WITH FACTORY INSTALLED LOW VOLTAGE CONTROLS LOCATED IN AIR DOOR CABINET.  
2. FACTORY PROVIDED, WIRED, AND UNIT MOUNTED SPEED CONTROLLER LOCATED ABOVE CEILING.  
3. FACTORY WIRED DISCONNECT.  
4. FACTORY PROVIDED, FIELD INSTALLED REMOTE WALL SWITCHES FOR HEATING ON/OFF AND FAN ON/AUTO SWITCH. SEE AIR CURTAIN WIRING DIAGRAM DETAIL THIS SHEET.  
5. PROVIDE WITH DIVERTER BOX FROM TOM BARRON COMPANY. PROVIDE WITH MOUNTING BRACKETS PER MANUFACTURER'S RECOMMENDATIONS. INSTALL PER MANUFACTURER'S MOUNTING INSTRUCTIONS.

CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARRON COMPANY FOR THE ROYAL METAL START COLLARS. THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE ROYAL METAL START COLLARS DIRECTLY FROM TOM BARRON COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100 FOR PRICING AND AVAILABILITY. ROYAL METAL START COLLARS NOT PURCHASED THRU TOM BARRON COMPANY WILL NOT BE ACCEPTED.



### AIR DEVICE SCHEDULE

| MARK | DESCRIPTION  | LOCATION            | NECK SIZE | FACE SIZE | FRAME TYPE | REMARKS   |
|------|--|---------------------|-----------|-----------|------------|-----------|
| A    | PRICE MODEL APDC ALUMINUM SUPPLY AIR DIFFUSER WITH INDIVIDUALLY ADJUSTABLE CURVED AIR PATTERN CONTROLLERS.     | DINING AREA KITCHEN | SEE PLAN  | 24X24     | LAY-IN     | 1,7       |
| C    | PRICE MODEL SMCD STEEL SUPPLY AIR DIFFUSER FIELD ADJUSTABLE AIR PATTERN CONTROLLERS.                           | ENTRYS              | 14X14     | 20X20     | BEVELLED   | 1,3,5,6   |
| F    | PRICE MODEL 80 EGGCRATE RETURN AIR GRILLE WITH REMOVABLE WHITE COKE FACTORY FLAT BLACK BACKPAN AND ROUND NECK. | DINING KITCHEN      | SEE PLAN  | 24X24     | LAY-IN     | 1,7       |
| J    | PRICE MODEL SMCD STEEL SUPPLY AIR DIFFUSER FIELD ADJUSTABLE AIR PATTERN CONTROLLERS.                           | RESTROOMS           | 10X10     | 16X16     | BEVELLED   | 1,2,3,5,6 |
| K    | PRICE MODEL APDDR ALUMINUM PERFORATED FACE RETURN AIR GRILLE.  | RESTROOMS ENTRYS    | 14X14     | 17X17     | SURFACE    | 1,4,5,6   |

NOTES: MECHANICAL CONTRACTOR SHALL PURCHASE THE AIR DEVICES DIRECTLY FROM TOM BARRON COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100 FOR PRICING AND AVAILABILITY. AIR DEVICES NOT PURCHASED THRU TOM BARRON COMPANY WILL NOT BE ACCEPTED.

REMARKS: 1. STANDARD OFF WHITE FINISH.  
2. PROVIDE MODEL VCS3 NECK DAMPER.  
3. SEE DRAWING M11 FOR THROW.  
4. PROVIDE MODEL V077 NECK DAMPER ON GRILLES IN RESTROOMS.  
5. PROVIDE MODEL MC7 SEAL JOINTS WITH MASTIC AND INSULATE EXTERNALLY.  
6. FIELD INSULATE BACKPAN AS SHOWN ON DETAIL 1M3.I.  
7. FACTORY INSULATED R-6 BACKPAN.

### EXHAUST FAN SCHEDULE

| MARK         | CFM   | ESP  | RPM   | TP SPEED (RPM) | HP (WATTS) | AREA SERVED     | MODEL   | MANUFACTURER | REMARKS |
|--------------|-------|------|-------|----------------|------------|-----------------|---------|--------------|---------|
| EF#1 (NEW)   | 1,912 | 0.75 | 1,331 | 5,226          | 3/4        | HOOD#1 & HOOD#2 | 150 QPS | LOREN COOK   | H2      |
| EF#2 (NEW)   | 1,402 | 0.95 | 1,199 | 4,708          | 3/4        | HOOD#2 & HOOD#3 | 150 QPS | LOREN COOK   | H2      |
| EF#3 (EXIST) | 500   | -    | -     | -              | -          | RESTROOMS       | -       | EXISTING     | -       |

NOTES: GREASE EXHAUST FAN RPM BASED ON 80 DEGREE F AIR AT 1000 FEET ABOVE SEA LEVEL.  
GREASE EXHAUST FANS TO BE UL 762 LISTED.  
CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARRON COMPANY FOR FAN/CLRB PACKAGE. MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE FAN/CLRB PACKAGE DIRECTLY FROM TOM BARRON COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-0100 FOR PRICING AND AVAILABILITY. FANS AND CURBS NOT PURCHASED THRU TOM BARRON COMPANY WILL NOT BE ACCEPTED.

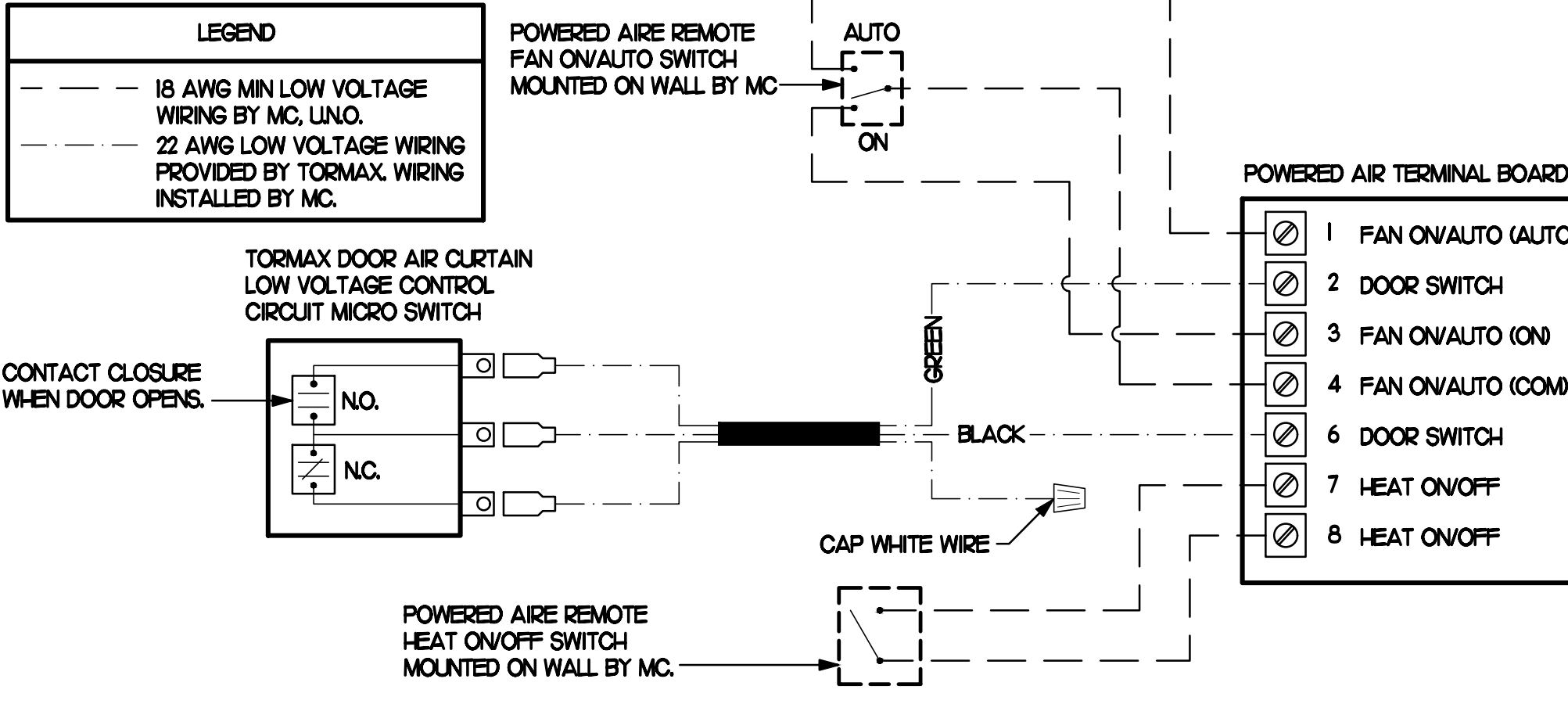
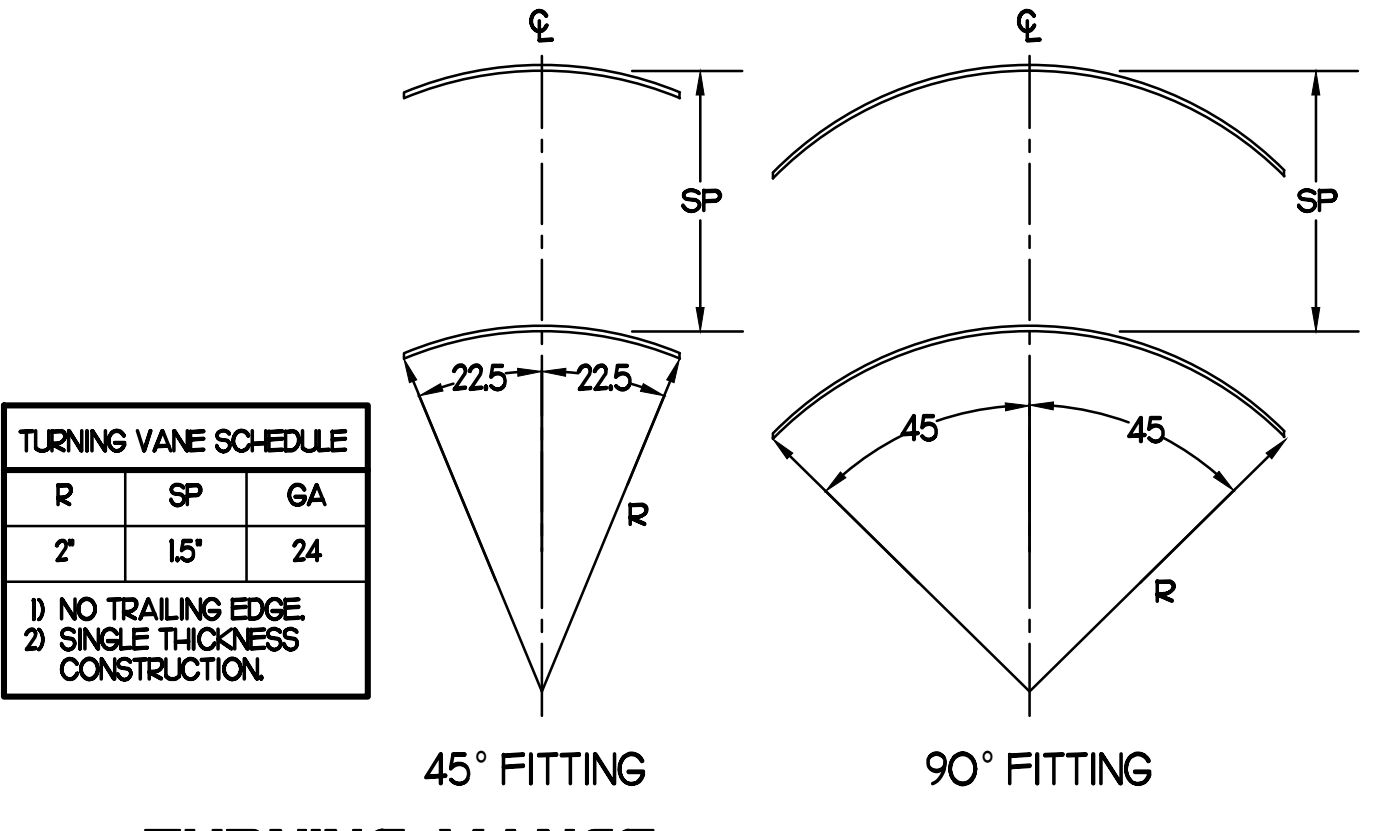
REMARKS: 1. PROVIDE AND INSTALL ROOFTOP SOLUTIONS G2 DRIP GUARD, M.C. TO CONTACT ROOFTOP SOLUTIONS AT 800-919-7034.  
2. PROVIDE FACTORY INSTALLED, PRE-WIRED, NEMA 3 NON-FUSED DISCONNECT. COORDINATE WITH E.C.  
3. INTEGRAL THERMAL OVERLOAD WITH AUTOMATIC RESET.  
4. UPELAST, ARRANGEMENT 10, COW ROTATION. SEE PLANS TO CONFIRM CONFIGURATION.  
5. PROVIDE FACTORY STEEL FAN WHEEL.  
6. PROVIDE FACTORY STEEL INLET FLANGE AND INLET COMPANION FLANGE.  
7. PROVIDE FACTORY WEATHER HOUSING W/ HINGED ACCESS DOOR.  
8. PROVIDE FACTORY DRAIN CONNECTION.  
9. PROVIDE FACTORY BOLTED ACCESS DOOR ON SCROLL.  
10. PROVIDE FACTORY STEEL OUTLET COMPANION FLANGE.  
11. UTILITY SET FAN CURB AND ASSOCIATED EXHAUST DUCT CURB PROVIDED BY TOM BARRON COMPANY.  
12. PROVIDE FACTORY BELT DRIVE WITH ADJUSTABLE MOTOR SHEAVE AND SPARE BELT.

### ELECTRIC ROOFTOP UNIT SCHEDULE

| MARK       | COOLING CAPACITY (MBH) |       | HEATING CAPACITY (KW) |        | FAN SECTION (CFM) |       |         | MODEL     | MANUFACTURER | REMARKS        |
|------------|------------------------|-------|-----------------------|--------|-------------------|-------|---------|-----------|--------------|----------------|
|            | TOTAL                  | SENS  | INPUT                 | STAGES | SUPPLY            | O.A.  | HP ESP  |           |              |                |
| ACH (NEW)  | 1023                   | 75J   | 45.0                  | 2      | 3,150             | 750   | 20 0.75 | LCH1024M  | LENNOX       | 1,2,5,13,15-18 |
| ACH2 (NEW) | 2825                   | 205.3 | 90.0                  | 2      | 8,500             | 1,900 | 75 0.75 | LCH30054M | LENNOX       | H2,16-18       |
| ACH3 (NEW) | 1244                   | 89.6  | 60.0                  | 2      | 4,000             | 1,000 | 30 0.75 | LCH1204M  | LENNOX       | 1,2,5,13,15-18 |
| ACH4 (NEW) | 913                    | 64.8  | 45.0                  | 2      | 2,750             | 600   | 20 0.75 | LCH0924M  | LENNOX       | 1,2,5,13,15-18 |
| ACH5 (NEW) | 632                    | 46.8  | 22.5                  | 2      | 2,000             | 300   | 10 0.75 | LCH0604E  | LENNOX       | 1,2,5,11,4-18  |

NOTES: COOLING CAPACITIES ARE GROSS, BASED ON INDOOR EDB 80F, INDOOR EWB 67F, OUTDOOR EDB 95F. FOR PROPER BUILDING AIR BALANCE, VERIFY AMOUNT OF OUTSIDE AIR PROVIDED BY ALL EXISTING UNITS. ADJUST AS PER SCHEDULE IF NECESSARY.  
VERIFY MIN 10' DISTANCE OF O.A. INTAKE OPENINGS OF A/C UNITS FROM ANY EXISTING SOURCE OF AIR POLLUTION (EXHAUST FAN, COMBUSTION FUE, VENT ETC). IF SUCH CONDITIONS EXIST, CONTRACTOR IS REQUIRED TO DUCT OUTSIDE AIR INTAKE ON ROOF AWAY FROM ANY SUCH SOURCE.

REMARKS: 1. PROVIDE DIFFERENTIAL ENTHALPY ECONOMIZER WITH POWER EXHAUST. ECONOMIZER TO BE LOW LEAKAGE/HIGH PERFORMANCE.  
2. SEE DETAIL 2/M41 FOR SETTING OF PRODIGY M3 BOARD CONTROL PARAMETERS BY MC.  
3. PROVIDE 14" HIGH ROOF CURB.  
4. PROVIDE FACTORY INSTALLED AND UNIT POWERED 115V GFI SERVICE OUTLET.  
5. PROVIDE FACTORY INSTALLED RETURN SIDE SMOKE DETECTOR.  
6. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL DISCONNECT. COORDINATE WITH E.C.  
7. PROVIDE 2" MERV 8 THROW AWAY FILTERS.  
8. PROVIDE HINGED PANELS FOR FILTER ACCESS, FAN MOTOR ACCESS, COMPRESSOR ACCESS AND CONTROL COMPARTMENT ACCESS.  
9. PROVIDE FACTORY COIL HAIL GUARD, FIELD INSTALLED.  
10. PROVIDE HUMIDITY CONTROL OPTION WITH FACTORY WALL MOUNTED HUMIDITY SENSOR.  
11. PROVIDE WITH FACTORY CONDENSATE DRAIN PAN OVERFLOW SWITCH.  
12. PROVIDE FACTORY INSTALLED BELT TENSIONER.  
13. PROVIDE WITH FACTORY RETURN AIR ADAPTER PLATE.  
14. PROVIDE WITH ADAPTER CURB, UNIT BEING REPLACED IS LENNOX MODEL LCA060H. ADAPTER CURB IS PROVIDED BY LENNOX AS PART OF THE TOTAL EQUIPMENT PACKAGE.  
15. PROVIDE FACTORY INSTALLED 115V GFI SERVICE OUTLET.  
16. PROVIDE WITH MSAV BLOWER.  
17. PROVIDE FACTORY CONFIGURED PHASE LOSS PROTECTION.  
18. PROVIDE FACTORY INSTALLED ELECTRIC HEAT. CAPACITY SHOWN IS FOR MINIMAL 208V.



### DUCTLESS SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE

| MARK          | COOLING CAPACITY (MBH) |     | HEATING CAPACITY (MBH) |     | EFFICIENCIES | FAN SECTION (CFM) | ELECTRICAL DATA |       | R-410A MODEL | MFR      |                |             |          |
|---------------|------------------------|-----|------------------------|-----|--------------|-------------------|-----------------|-------|--------------|----------|----------------|-------------|----------|
|               | MIN                    | MAX | MIN                    | MAX |              |                   | SEER            | HSPFF |              |          | AIR FLOW (MET) | NCA (MOCP)  | VOLTAGE  |
| AH1/CM1 (NEW) | 180                    | 335 | 180                    | 400 | 16.2         | 10.0              | 635-730-830     | 28    | 140          | 208/1160 | PKA-A36KA7     | PLZ-4A36WA5 | MTSLBISH |

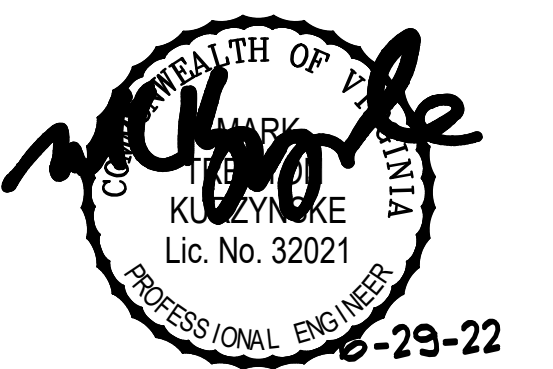
NOTES: MECHANICAL CONTRACTOR SHALL PURCHASE THE SPLIT SYSTEM HEAT PUMP DIRECTLY FROM TRANE/MTSLBISH. CONTACT MS. LALRI FRANKOWSKI AT 630-400-4285, FOR PRICING AND AVAILABILITY.

REMARKS: 1. ELECTRICIAN TO PROVIDE NON-FUSED DISCONNECT.  
2. MECHANICAL TO PROVIDE AND INSTALL REFRIGERANT PIPING AS PER MFR RECOMMENDATIONS.  
3. PROVIDE ENGRAVED PLASTIC LABEL AT AHU AND CU WITH 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND RIVETED TO UNIT CABINET.  
4. PROVIDE WITH ADEQUATE REFRIGERANT LINE SET. FIELD VERIFY DISTANCE FROM WHERE CONDENSER IS TO BE SET TO AIR HANDLER LOCATION PRIOR TO ORDERING.  
5. PROVIDE WITH WALL MOUNTED THERMOSTAT (TAR-CT01MAL-SBL) USE TWO-WIRE, STANDARD, NON-POLAR CONTROL WIRE TO CONNECTOR TB5 ON INDOOR UNIT CONTROLLER. PROGRAM THERMOSTAT CONTROLS TO MATCH DRIVE-THRU RTU SETPOINTS.  
6. PROVIDE PAC-SE55RA-E CONNECTOR AT INDOOR UNIT (CONNECTOR CN3), WIRE ORANGE AND RED WIRES TO SPARE POLE ON RELAY R-1 IN SLNCOAST T-500 PANEL (TERMINALS 11 AND 7 RESPECTIVELY) AND CAP THE BROWN WIRE.  
7. PROVIDE WITH CONDENSATE PUMP (BLUE DIAMOND MAXI BLUE MODEL# X67-72).



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CHICK-FIL-A  
CENTRAL PARK  
1698 CARL D SILVER PKWY  
FREDERICKSBURG, VA 22401-4924

FSR#01634

BUILDING TYPE / SIZE: S04-152  
RELEASE: 21.05

| NO. | DATE     | DESCRIPTION                    |
|-----|----------|--------------------------------|
| 1   | 01/21/22 | Gov't Comments                 |
| 3   | 05/28/22 | Operator Comments/Coordination |

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SHEET  
MECH DETAILS  
& SCHEDULES  
SHEET NUMBER

M3.1

E

D

C

B

A

E

D

C

B

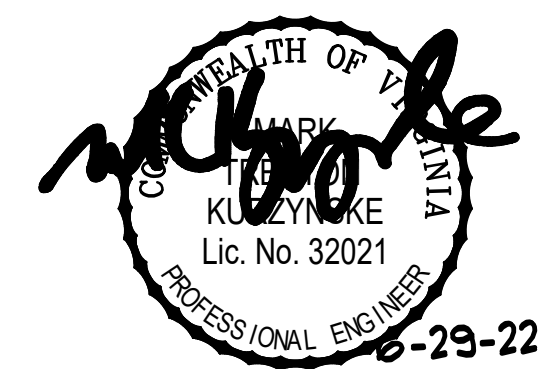
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Chick-fil-A

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SHEET HVAC CONTROLS

SHEET NUMBER

M4.1

**LEGEND**

S.E.C. SUNCOAST ENVIRONMENTAL CONTROLS (SUPPLIER OF TEMP/FAN CONTROL PANEL) LOCATED IN KITCHEN  
KEY NOTE REFERENCE

MC MECHANICAL CONTRACTOR

AC SUNCOAST RELAY FACTORY INSTALLED AND WIRED IN CFA-500 PANEL. ENERGIZED BY PUTTING STORE SWITCH IN 'STORE OCCUPIED' POSITION.

AN SUNCOAST RELAY FACTORY INSTALLED AND WIRED IN CFA-500 PANEL. DE-ENERGIZED WHEN ANSL FIRE SUPPRESSION SYSTEM IS ACTIVATED, AS NOTED.

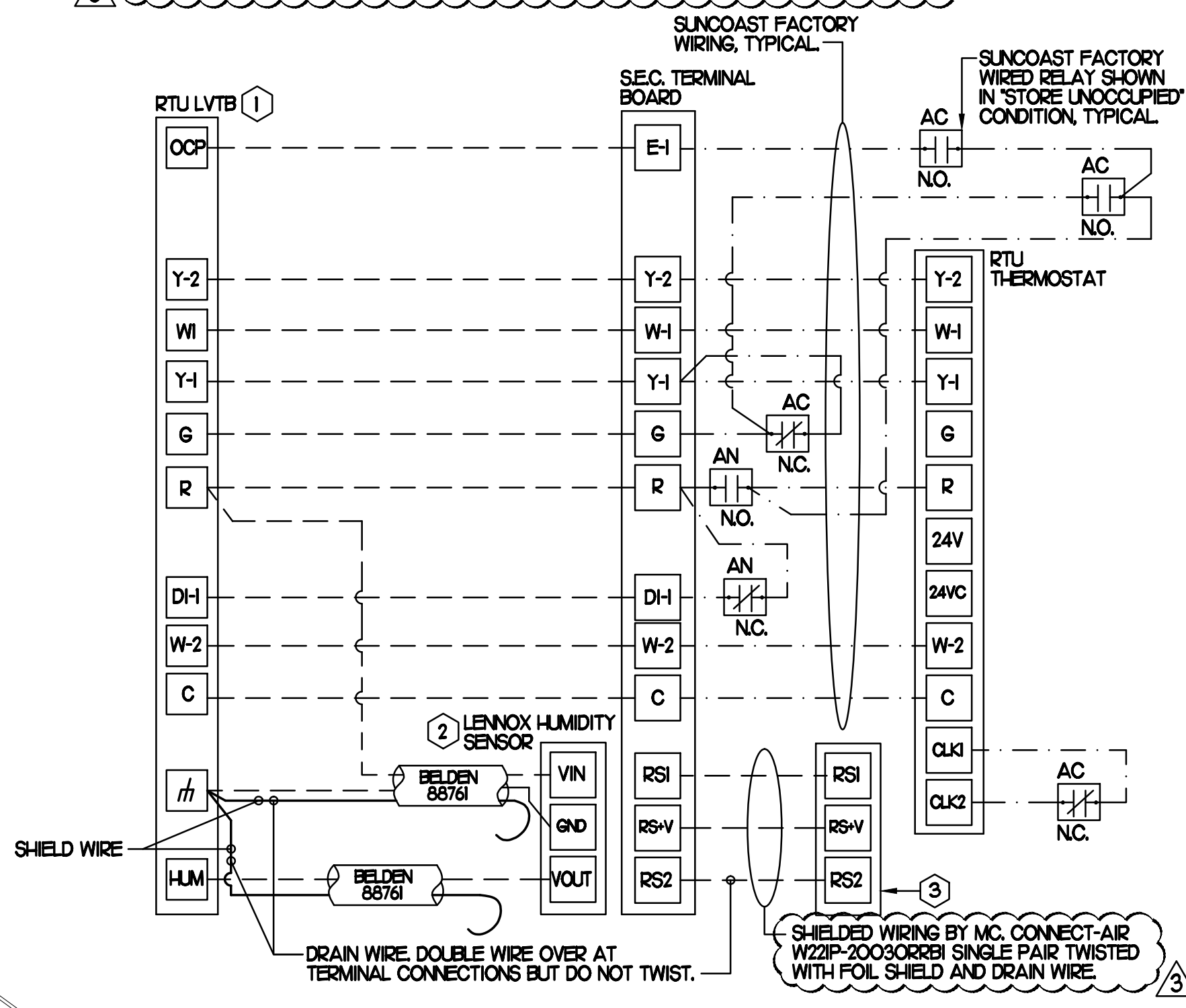
--- 22 AWG MIN LOW VOLTAGE WIRING BY MC. UNO. USE CONNECT-AIR SINGLE PAIR TWISTED WITH FOIL SHIELD AND DRAIN WIRE FOR TEMPERATURE SENSORS. (NOT FOR HUMIDITY SENSORS)

--- LOW VOLTAGE WIRING BY S.E.C.

--- LINE VOLTAGE BY ELECTRICIAN OR S.E.C.

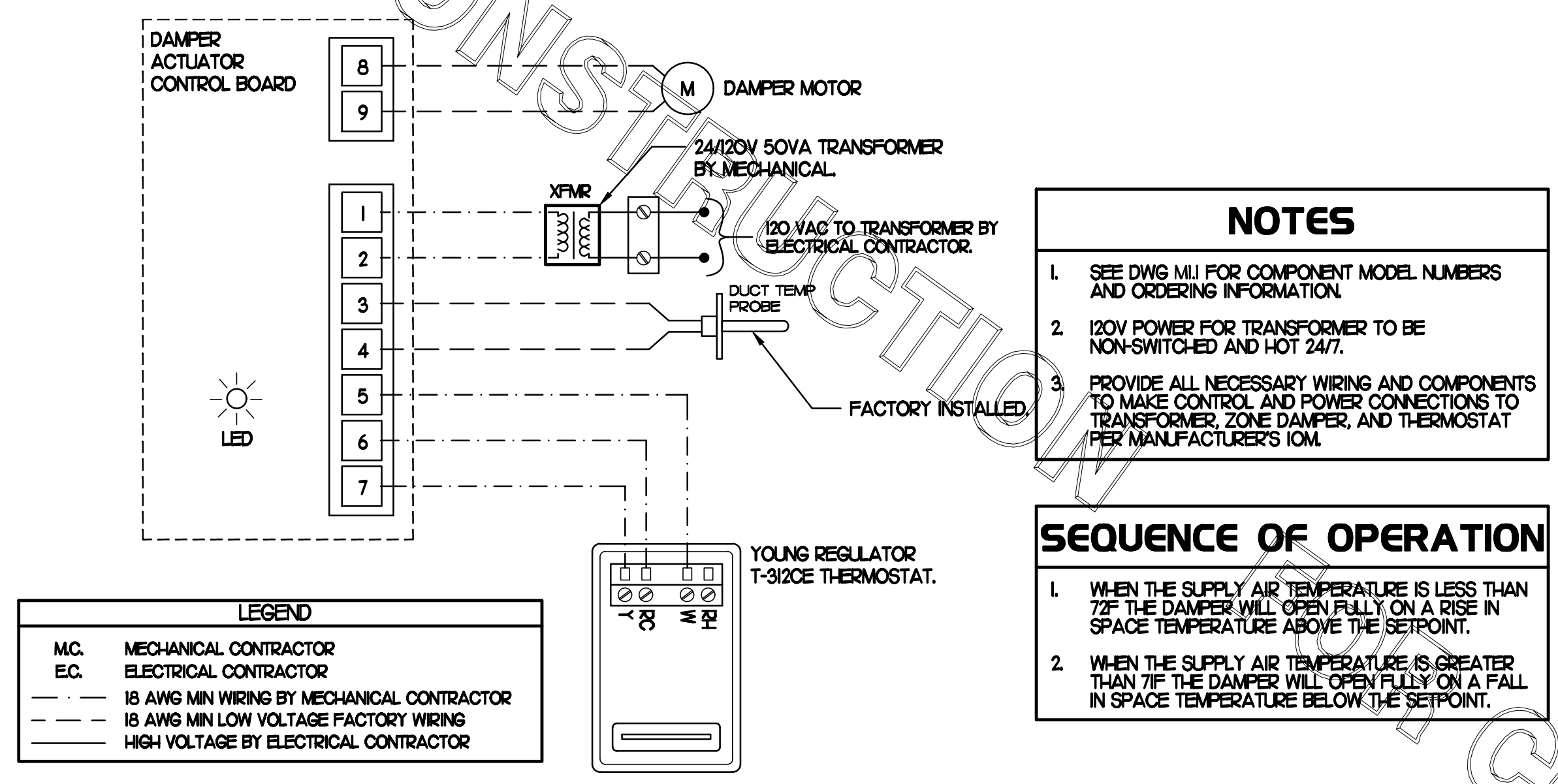
PROVIDE A PROFESSIONALLY LAMINATED COPY OF THESE DETAILS TO BE INSTALLED INSIDE THE ROOFTOP UNIT CONTROL CABINET. USE A SETON CHART FRAME STYLE #68624. TELEPHONE NUMBER 800-243-6624. FOR MOUNTING THE DETAIL, ATTACH THE FRAME TO THE INTERIOR OF THE UNIT IN PLAIN AND EASY VIEW OF THE CONTROLS SECTION. CONTACT ENGINEER OF RECORD FOR A REPRODUCIBLE COPY OF THE DETAIL.

- NOTES**
- FOR ALL RTUS EXCEPT AT KITCHEN RTUS, CHANGE PRODIGY-M3 BOARD CONTROL PARAMETER #65 TO ZERO (#58 ON LCH UNITS). ON OLDER BOARDS THIS IS ECTO PARAMETER 3.01 FOR LCH UNITS OR ECTO 2.01 FOR LCH UNITS. THIS WILL CAUSE THE O.A. DAMPER TO OPEN ON 'OCCUPIED' START. AT KITCHEN RTUS LCH TYPE LEAVE THE SETTING AT THE DEFAULT VALUE SO THE O.A. DAMPER WILL REMAIN CLOSED FOR THE FIRST 60 MINUTES AFTER 'OCCUPIED' START. AT KITCHEN RTUS (LCH TYPE) CHANGE THE VALUE TO 5400 SO THE O.A. DAMPER WILL REMAIN CLOSED FOR THE FIRST 90 MINUTES AFTER 'OCCUPIED' START.
  - MECHANICAL CONTRACTOR SHALL MAKE PLASTIC LAMINATE OF THIS DETAIL AND INSTALL PERMANENTLY ON INSIDE DOOR OF ROOFTOP UNIT CONTROL COMPARTMENT.
  - SEE DETAILS THIS SHEET FOR SMOKE DETECTOR AND ANNUNCIATOR WIRING.
  - AT HUMIDITROL RTUS SET PRODIGY-M3 BOARD CONTROL PARAMETER #106 FOR DEHUMIDIFICATION SET POINT TO A VALUE OF 60 (#60 RH).
  - AT HUMIDITROL RTUS, SET PRODIGY-M3 BOARD CONTROL PARAMETER #107 FOR DEHUMIDIFICATION MODE DEAD BAND TO A VALUE OF 2 (#2 RH).
  - SET ALL THERMOSTATS FOR AUTO CHANGEOVER.
  - FOR MS4V UNITS, SET THE MS4V LOW SPEED SETTING TO THE SAME VALUE AS THE HIGH SPEED SETTING AFTER TAB IS COMPLETE.
  - PROVIDE PLASTIC ENGRAVED LABEL AT ALL NEW SENSORS WITH 1/2" HIGH WHITE LETTERING ON BLACK BACKGROUND, I.E. "ACH#2 HUMIDITY SENSOR" OR "ACH#2 TEMP SENSOR". PLACE LABELS ON WALL ADJACENT TO DEVICE. DO NOT APPLY DIRECTLY TO DEVICE.
- KEYED NOTES**
- LOW VOLTAGE WIRING TO RTU TO BE ROUTED TO UNIT THRU FACTORY WIREWAY.
  - HUMIDITROL UNITS ONLY: WIRING TO HUMIDITY SENSOR TO BE MADE WITH TWO SEPARATE RUNS OF SHIELDED TWISTED PAIR. TERMINATE SHIELD WIRES AT TB4, LEAVE OPEN AT SENSOR.
  - NETWORK TSTAT REMOTE TEMP SENSOR PROVIDED BY SUNCOAST AND INSTALLED BY MC. FIELD CALIBRATE EACH SENSOR.



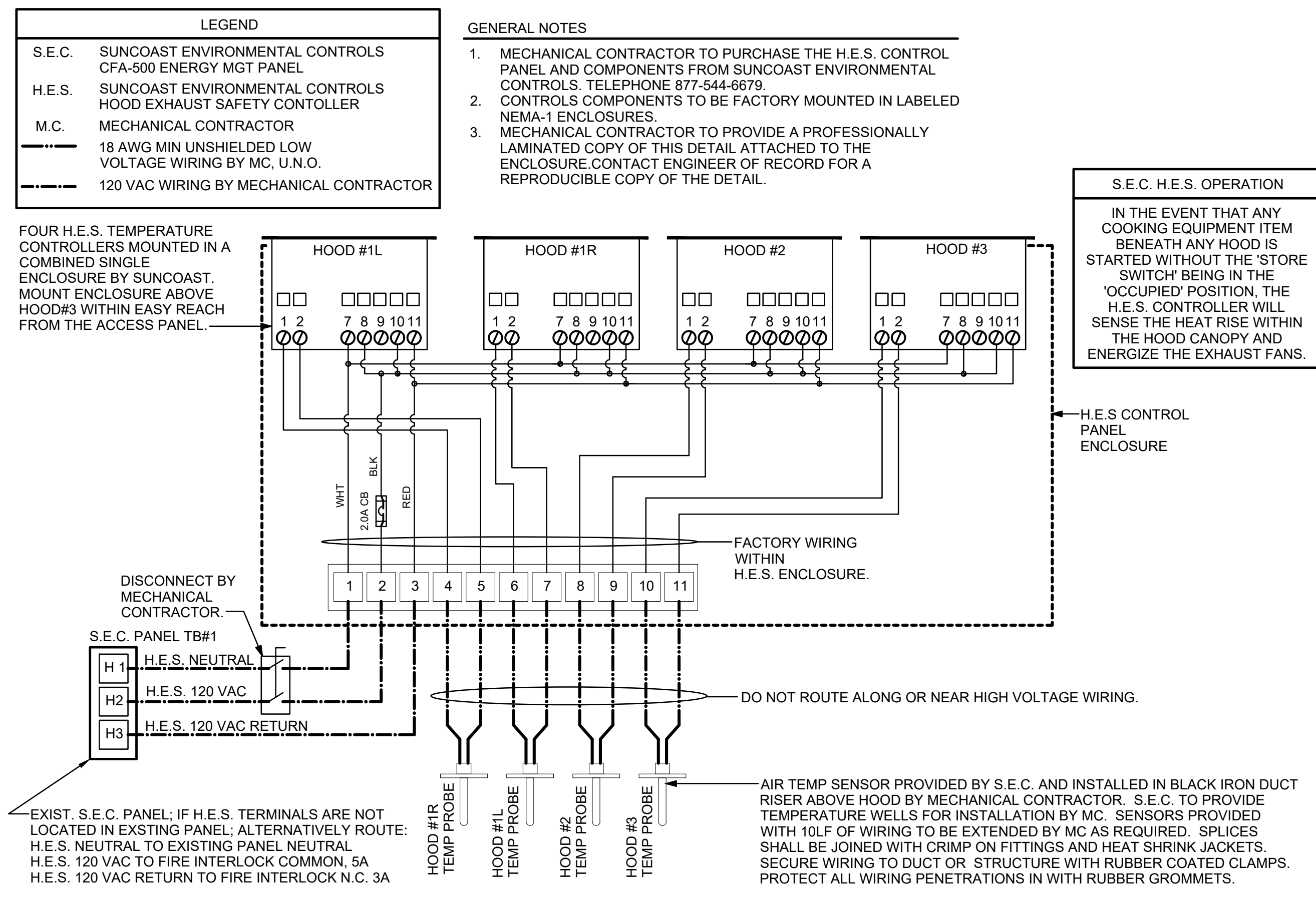
2 ROOFTOP UNIT CONTROL WIRING - LENNOX

4 OFFICE VAV DAMPER AND TSTAT

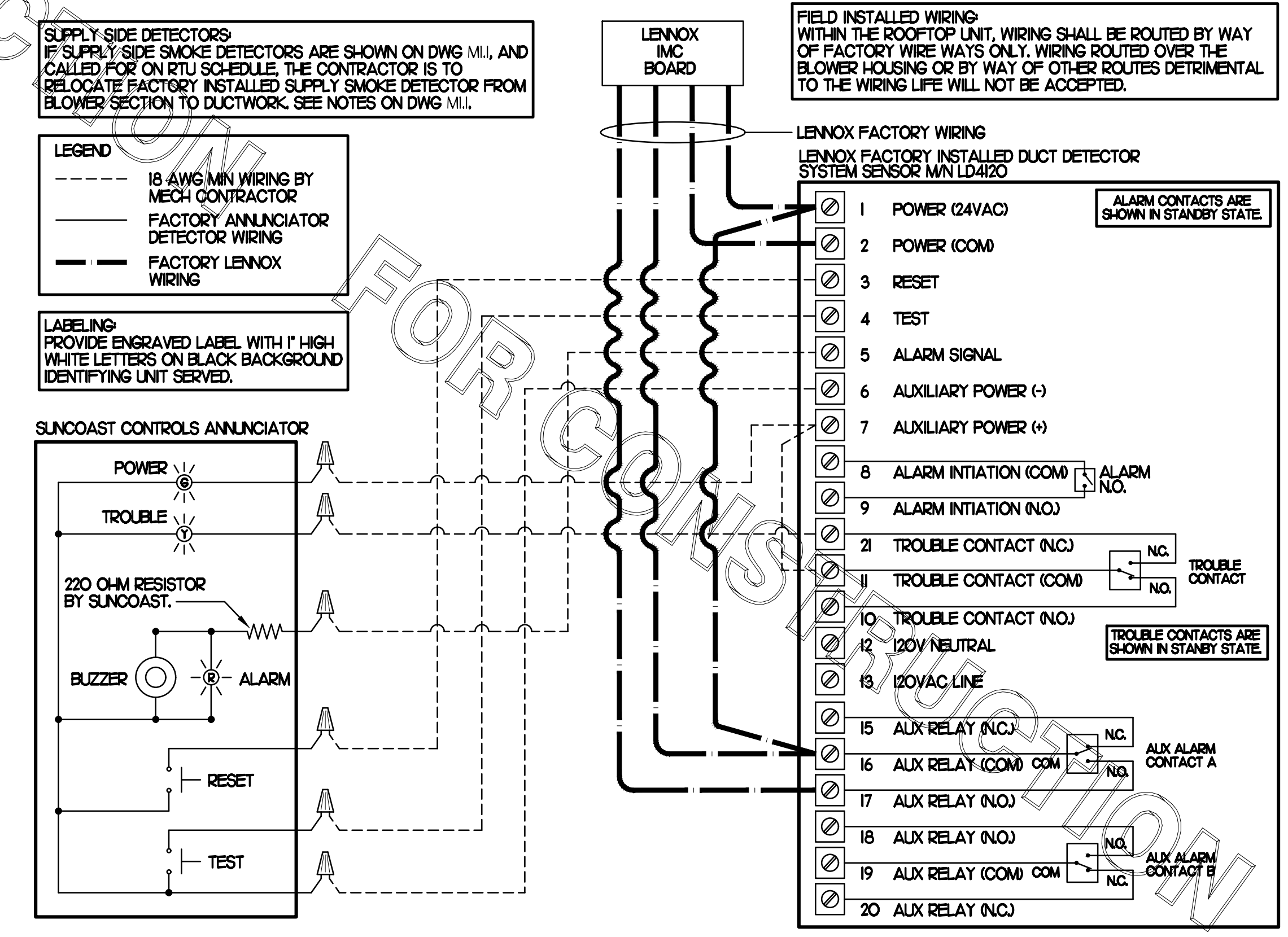


- NOTES**
- SEE DWG M11 FOR COMPONENT MODEL NUMBERS AND ORDERING INFORMATION.
  - 120V POWER FOR TRANSFORMER TO BE NON-SWITCHED AND HOT 247.
  - PROVIDE ALL NECESSARY WIRING AND COMPONENTS TO MAKE CONTROL AND POWER CONNECTIONS TO TRANSFORMER, ZONE DAMPER, AND THERMOSTAT PER MANUFACTURER'S IOM.

- SEQUENCE OF OPERATION**
- WHEN THE SUPPLY AIR TEMPERATURE IS LESS THAN 7°F THE DAMPER WILL OPEN FULLY ON A RISE IN SPACE TEMPERATURE ABOVE THE SETPOINT.
  - WHEN THE SUPPLY AIR TEMPERATURE IS GREATER THAN 7°F THE DAMPER WILL OPEN FULLY ON A FALL IN SPACE TEMPERATURE BELOW THE SETPOINT.



3 HOOD EXHAUST SAFETY SWITCH (H.E.S.) WIRING DIAGRAM



1 SMOKE DETECTOR AND ANNUNCIATOR WIRING DIAGRAM - LENNOX

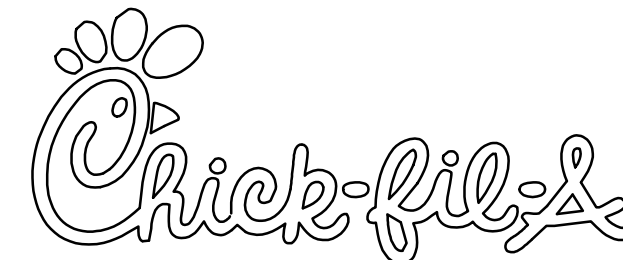
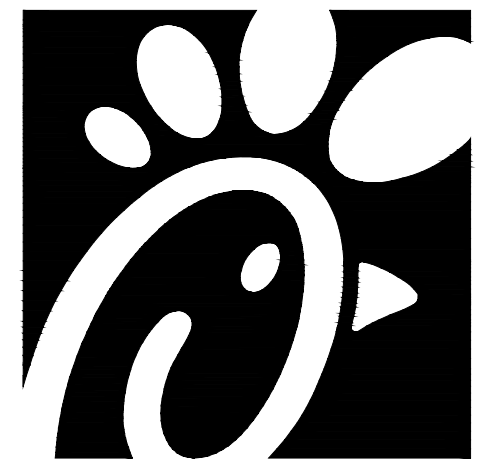
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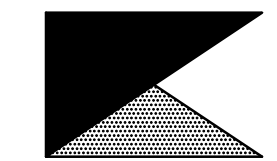
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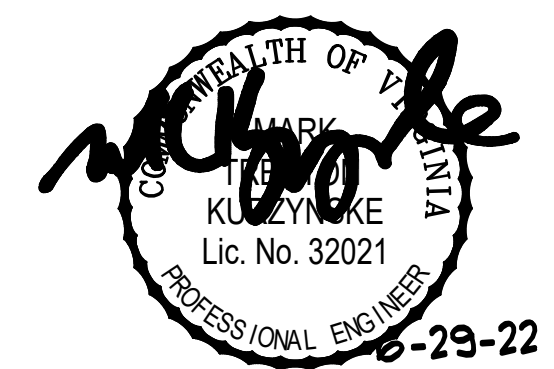
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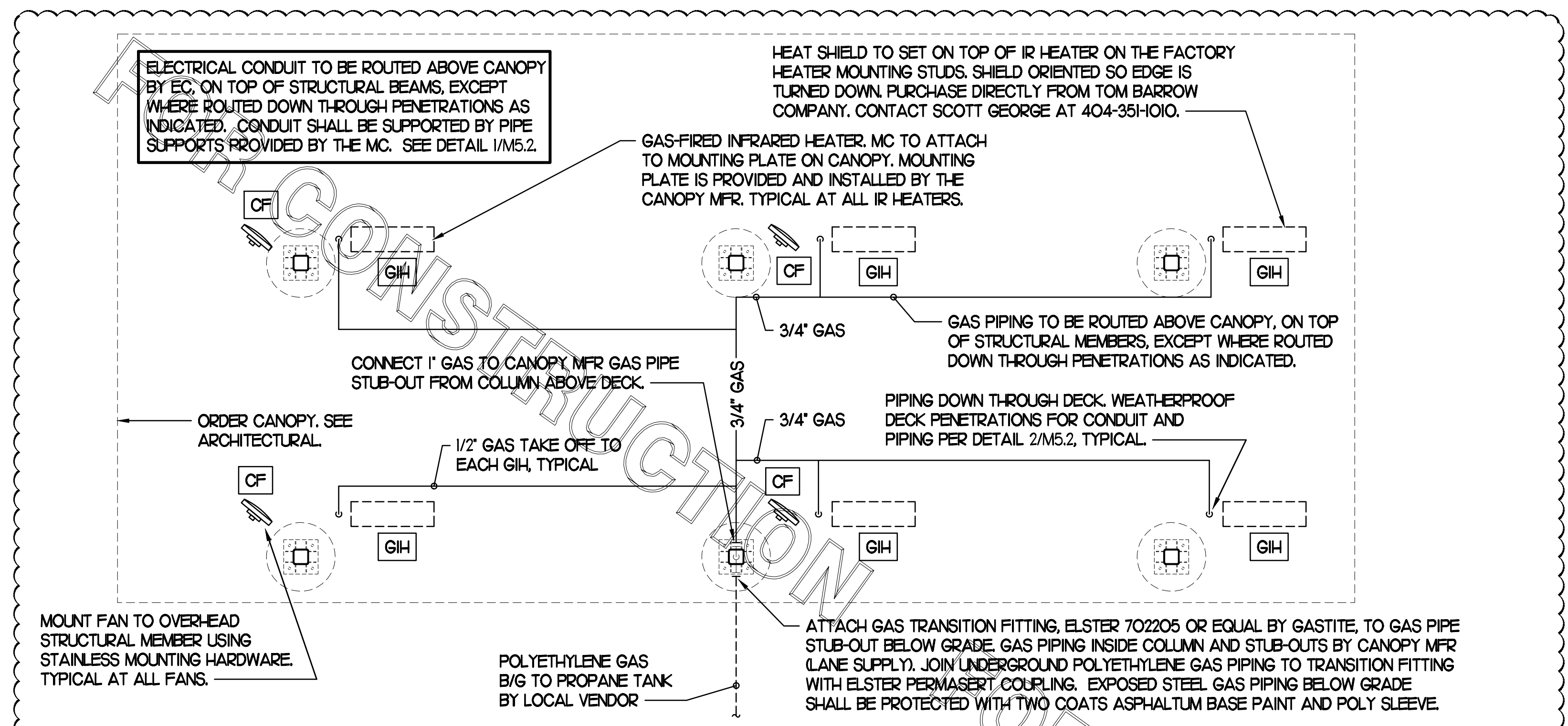
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| LEGEND |                               |     |                           |
|--------|-------------------------------|-----|---------------------------|
| CF#1   | CIRCULATING FAN #1 (TYP.)     | B/G | BELOW GRADE               |
| GIH#1  | GAS INFRARED HEATER #1 (TYP.) | EC  | ELECTRICAL CONTRACTOR     |
|        | NEW GAS PIPING ABOVE GRADE    | MC  | MECHANICAL CONTRACTOR     |
|        | NEW GAS PIPING BELOW GRADE    |     | CONDUIT ABOVE CANOPY DECK |

### GENERAL NOTES

- COORDINATE NEW WORK WITH EXISTING CONDUIT, STRUCTURE, AND PIPING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO START OF WORK.
- COORDINATE LOCATION AND RESPONSIBILITIES FOR UNDERGROUND PIPING AND ASSOCIATED TRENCHING WITH GENERAL CONTRACTOR PRIOR TO START OF WORK.
- EXPOSED GAS PIPING SHALL BE PAINTED BY GENERAL CONTRACTOR.
- ACTUAL NUMBER OF GAS INFRARED HEATERS & COOLING FANS WILL BE DETERMINED BY SITE-SPECIFIC CANOPY LAYOUT AND EQUIPMENT LOCATIONS, AS INDICATED ON ARCHITECTURAL PLANS.
- CONTROL WIRING FOR HEATERS BY EC. COORDINATE WIRE GAUGE WITH EC. SEE ELECTRICAL AND CONTROLS DRAWINGS, TYP.

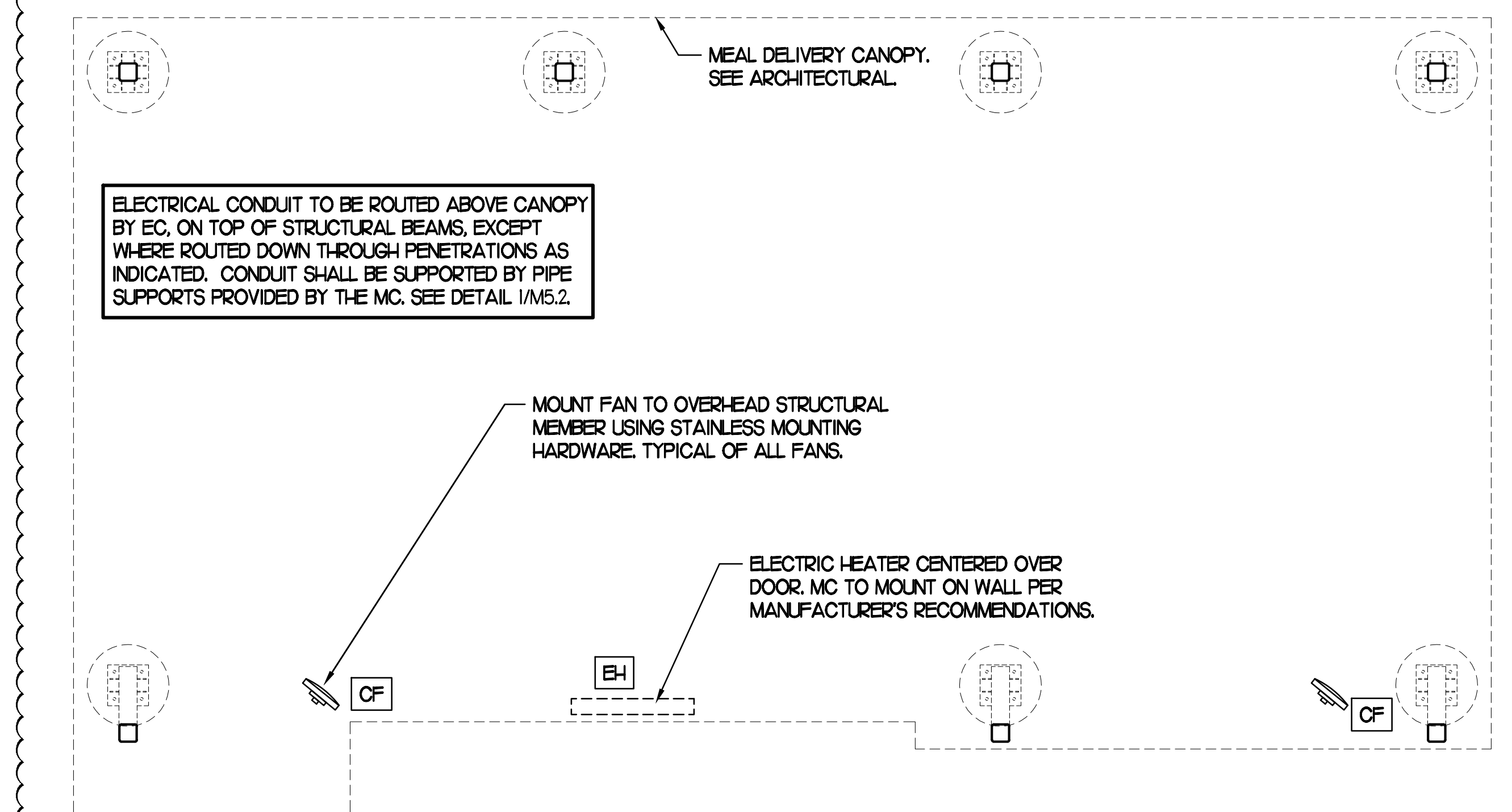


## 1 HVAC PLAN - ORDER POINT CANOPY

NO SCALE

VERIFY HEATER AND FAN QUANTITIES AND LOCATIONS WITH CANOPY SHOP DRAWINGS.

ABOVE GRADE PIPE TO BE SCHEDULE 40 METALLIC PIPE. SIZING FOR PIPING BASED ON TABLE 402.4 (28) OF THE INTERNATIONAL FUEL GAS CODE FOR UNDILUTED PROPANE • 11.0 IN. W.C. • 250 FT.



## 2 HVAC PLAN - MEAL DELIVERY CANOPY

NO SCALE

CONSTRUCTION

**CHICK-FIL-A**  
**CENTRAL PARK**  
1698 CARL D SILVER PKWY  
FREDERICKSBURG, VA 22401-4924

**FSR#01634**

|                          |          |                |
|--------------------------|----------|----------------|
| BUILDING TYPE / SIZE:    | S04-152  |                |
| RELEASE:                 | 21.05    |                |
| <b>REVISION SCHEDULE</b> |          |                |
| NO.                      | DATE     | DESCRIPTION    |
| 1                        | 01/21/22 | Gov't Comments |

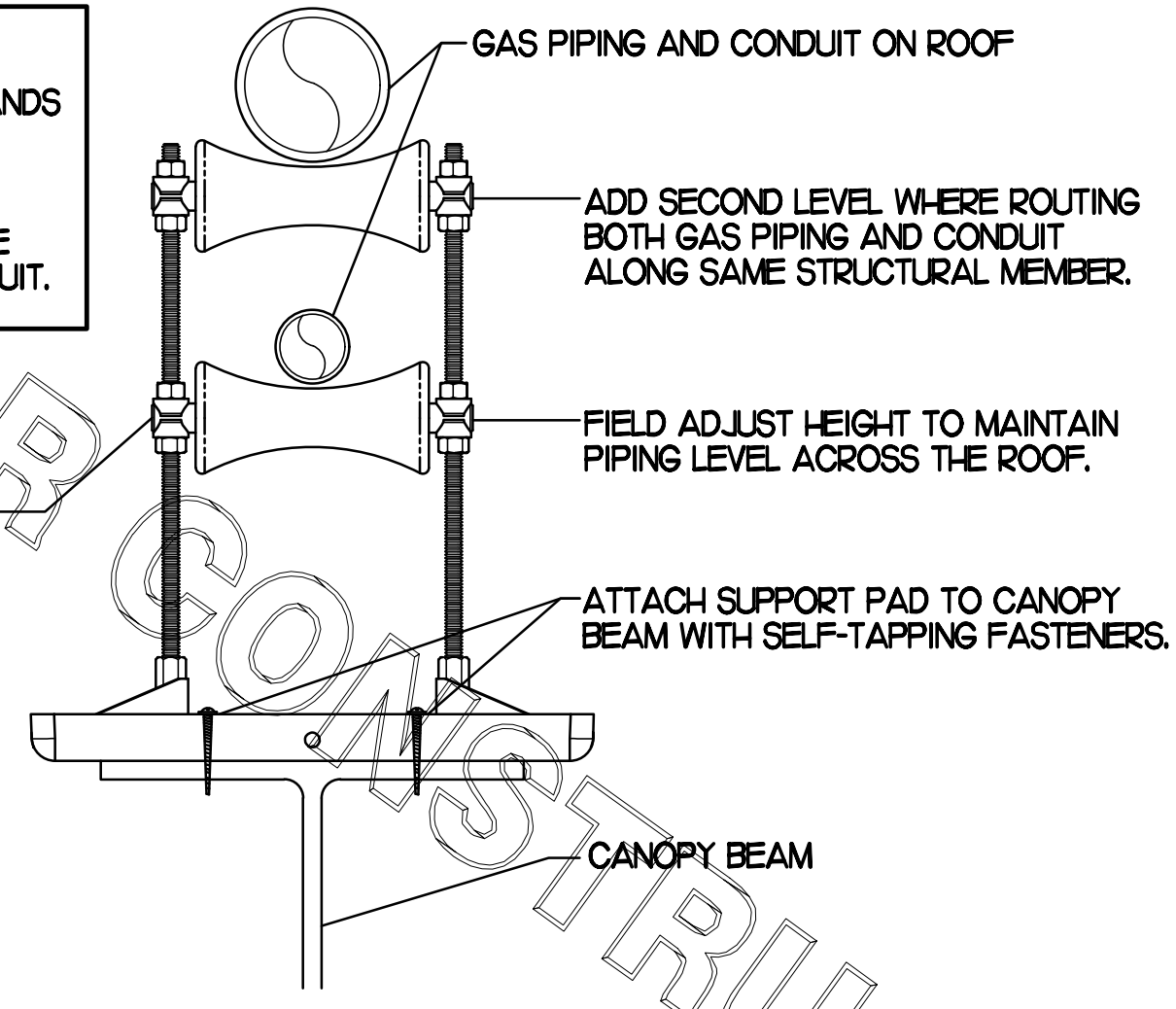
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| CONSULTANT PROJECT # | 21141.HF.R   |
| PRINTED FOR          | CONSTRUCTION |
| DATE                 | 10/28/2021   |
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SHEET  
CANOPY HVAC  
PLANS  
SHEET NUMBER

**M5.1**

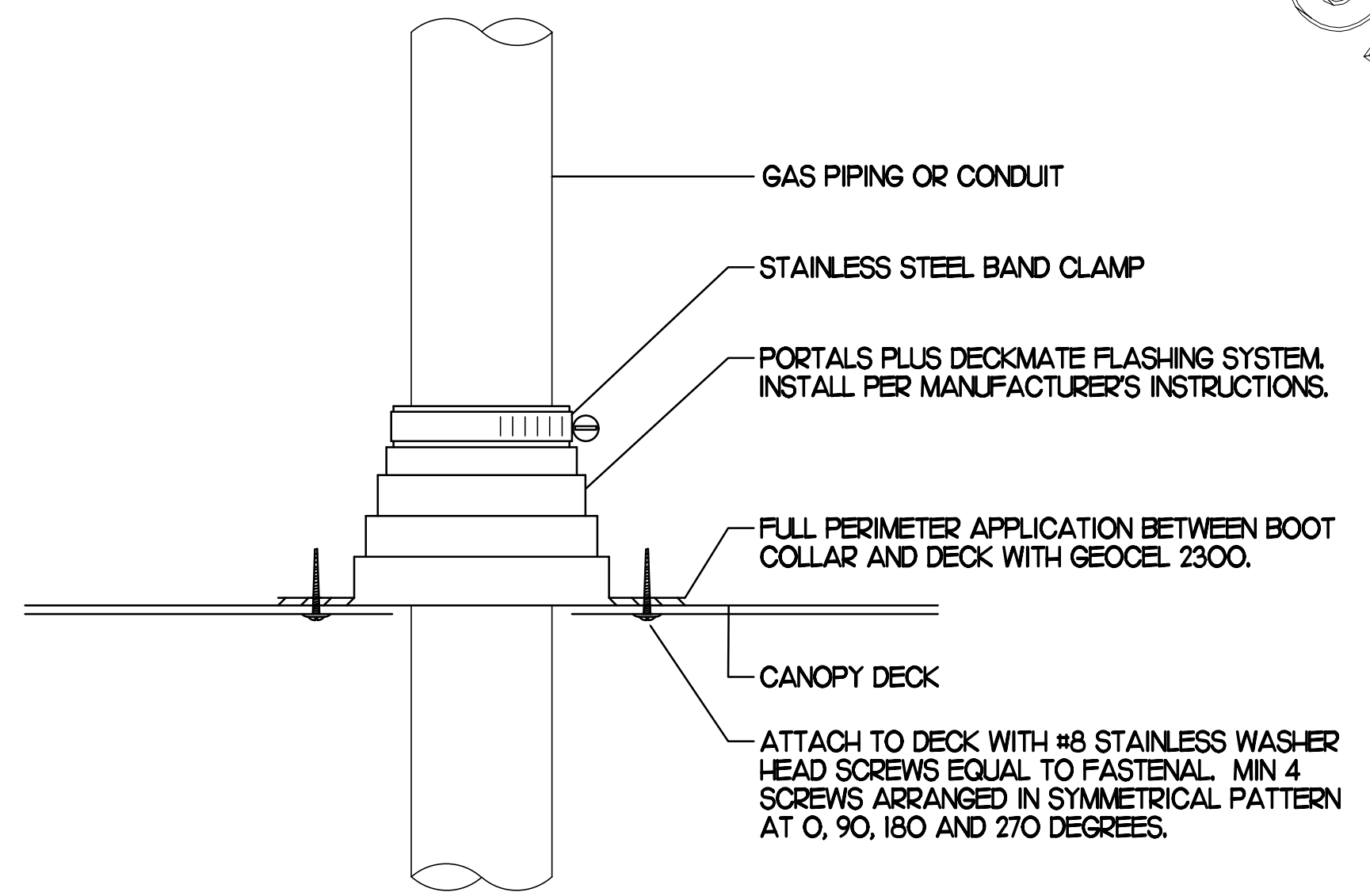
- NOTES:
1. DISTANCE BETWEEN PIPESTANDS NOT TO EXCEED 8'-0".
  2. MC TO PROVIDE DUAL LEVEL SUPPORT TO ACCOMMODATE BOTH GAS PIPING AND CONDUIT.

MIRO INDUSTRIES PIPESTAND.



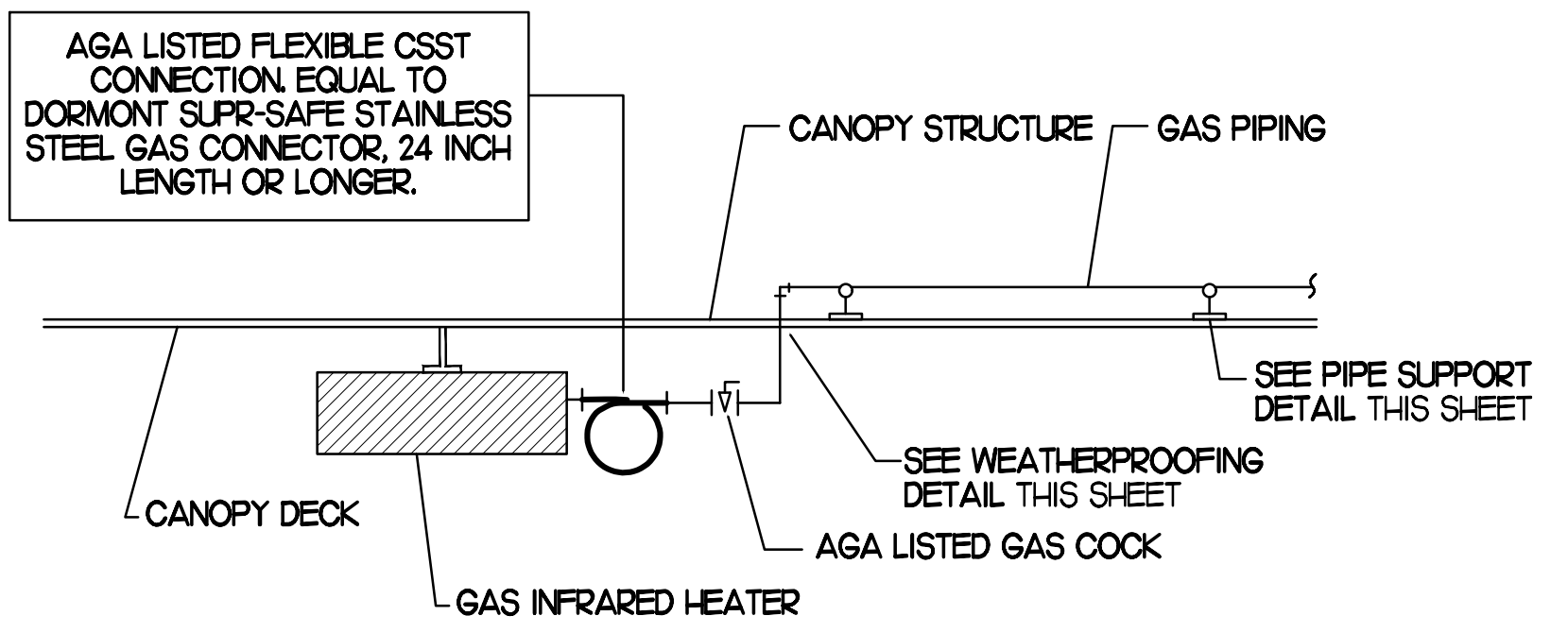
**1 PIPING SUPPORT ON CANOPY**

NO SCALE



**2 WEATHERPROOFING AT CANOPY PENETRATION**

NO SCALE



**3 GAS CONNECTION AT APPLIANCE**

NO SCALE

**BROMIC ELECTRIC HEATER SCHEDULE**

| MARK    | INPUT (KW)   | FRAME SIZE |       |       | MOUNTING TYPE | MODEL     | MANUFACTURER |
|---------|--|------------|-------|-------|---------------|-----------|--------------|
|         |  | LENGTH     | WIDTH | DEPTH |               |           |              |
| ALL EH  | 6.0  | 56"        | 8.5"  | 3.5"  | BRACKET       | BH0420005 | BROMIC       |
| NOTES   | <ul style="list-style-type: none"> <li>• CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH BROMIC COMPANY FOR THE ELECTRIC HEATER PACKAGE. THE MECHANICAL CONTRACTOR SHALL PURCHASE THE ELECTRIC HEATERS DIRECTLY FROM BROMIC COMPANY. CONTACT MR. FRANK SARVER AT 858-400-4063, FOR PRICING AND AVAILABILITY. BROMIC HEATERS NOT PURCHASED THRU BROMIC COMPANY WILL NOT BE ACCEPTED.</li> </ul> |            |       |       |               |           |              |
| REMARKS | <ol style="list-style-type: none"> <li>1. STAINLESS STEEL LENS WITH BLACK EMISSIVE COATING.</li> <li>2. PROVIDE ENGRAVED PLASTIC LABEL AT EACH UNIT WITH UNIT DESIGNATION IN 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND.</li> <li>3. PROVIDE WITH MOUNTING BRACKETS PER MANUFACTURER'S RECOMMENDATIONS.</li> </ol>  |            |       |       |               |           |              |

**GAS FIRED INFRARED HEATER SCHEDULE**

| MARK    | INPUT (MBH)   | FRAME SIZE |       |       | MOUNTING TYPE | MODEL  | MANUFACTURER |
|---------|---|------------|-------|-------|---------------|--------|--------------|
|         |   | LENGTH     | WIDTH | DEPTH |               |        |              |
| ALL GH  | 35.0  | 43-1/2"    | 13"   | 10"   | BRACKET       | 2313-L | SCHWANK      |
| REMARKS | <ol style="list-style-type: none"> <li>1. STEEL BURNER WITH CERAMIC BURNER TILES.</li> <li>2. STAINLESS STEEL LENS WITH BLACK EMISSIVE COATING.</li> <li>3. PROVIDE ENGRAVED PLASTIC LABEL AT EACH UNIT WITH UNIT DESIGNATION IN 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND. MOUNT TO CANOPY DECK, FACING DOWNWARD, 12" Laterally FROM THE SIDE OF THE HEATER.</li> <li>4. MOUNTING BRACKET PROVIDED AND INSTALLED BY CANOPY MFR.</li> <li>5. PROVIDE HEAT SHIELD ABOVE EACH HEATER AT THE BOTTOM OF THE BRACKET.</li> </ol> |            |       |       |               |        |              |

**CIRCULATING FAN SCHEDULE**

| MARK    | CFM  | RPM | HP | MODEL | MANUFACTURER |
|---------|--|-----|----|-------|--------------|
|         |  |     |    |       |              |
| REMARKS | <ol style="list-style-type: none"> <li>1. ALUMINUM PADDLE WITH STEEL HUB/SPIDER PROPELLER.</li> <li>2. 360 DEG. ROTATING HEAD HORIZONTALLY AND VERTICALLY.</li> <li>3. OSHA COMPLIANT DOUBLE LOCKING, COATED STEEL WIRE GUARD.</li> <li>4. 3-SPEED, TOTALLY ENCLOSED, PERMANENTLY LUBRICATED BALL BEARING MOTOR.</li> <li>5. FACTORY PRE-WIRED POWER CORD.</li> <li>6. PROVIDE FACTORY WALL MOUNTING BRACKET.</li> <li>7. PROVIDE ENGRAVED PLASTIC LABEL AT EACH UNIT WITH UNIT DESIGNATION IN 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND. MOUNT TO UNDERSIDE OF CANOPY OR EXISTING OVERHANG, FACING DOWNWARD, 12" Laterally FROM THE FAN LOCATION.</li> <li>8. REMOVE PULL CHAIN EXTENSION AT ON/OFF SWITCH IN FIELD.</li> <li>9. FACTORY CERTIFIED FOR OUTDOOR INSTALLATION.</li> </ol> |     |    |       |              |

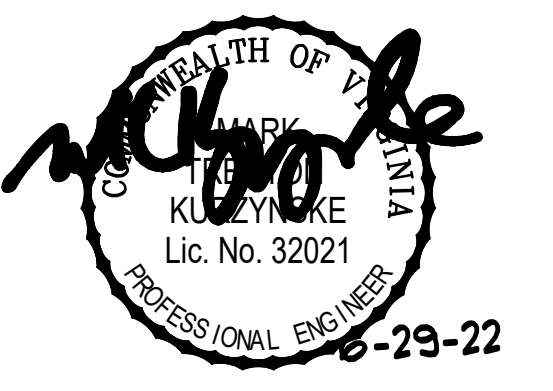


*Chick-fil-A*

**Chick-fil-A**  
5200 Buffington Road  
Atlanta, Georgia 30349



**Kurzynske & Associates**  
CONSULTING ENGINEERS  
2705 Lebanon Pike - Suite One  
Nashville, Tennessee 37214  
Telephone: (615) 255-5203



**CHICK-FIL-A**  
**CENTRAL PARK**  
1698 CARL D SILVER PKWY  
FREDERICKSBURG, VA 22401-4924

**FSR#01634**

BUILDING TYPE / SIZE: S04-152  
RELEASE: 21.05

**REVISION SCHEDULE**

| NO. | DATE     | DESCRIPTION    |
|-----|----------|----------------|
| 1   | 01/21/22 | Gov't Comments |

CONSULTANT PROJECT # 21141.HF.R  
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SHEET CANOPY DETAILS & SCHEDULES  
SHEET NUMBER

**M5.2**

**COMcheck Software Version 4.1.5.1**  
**Envelope Compliance Certificate**

**Project Information**

Energy Code: 2015 IECC  
 Project Title: Chick-fil-A #1634  
 Location: Fredericksburg (Fredericksburg (city)), Virginia  
 Climate Zone: 4a  
 Project Type: Addition  
 Vertical Glazing / Wall Area: 2%

Construction Site: 1698 Carl D Silver Parkway, Fredericksburg, VA 20401  
 Owner/Agent: Chick-fil-A, 5200 Buffington Road, Atlanta, GA 30349  
 Designer/Contractor: Kurzynske & Associates, 2705 Lebanon Pike - Suite One, Nashville, TN 37214, 615-255-5203

**Building Area**

| Building Area   | Floor Area |
|---|------------|
| 1-Storage/Office (Dining, Cafeteria/Fast Food) : Nonresidential | 379        |
| 2-Drive thru (Dining, Cafeteria/Fast Food) : Nonresidential     | 37         |

**Envelope Assemblies**

| Assembly   | Gross Area or Perimeter | Cavity R-Value | Cont. R-Value | Proposed U-Factor | Budget U-Factor <sub>90</sub> |
|--|-------------------------|----------------|---------------|-------------------|-------------------------------|
| Roof 1: Insulation Entirely Above Deck, [Bldg. Use 1 - Storage/Office]   | 406                     | ---            | 30.0          | 0.032             | 0.032                         |
| Floor 1: Slab-On-Grade Unheated, Vertical 2 ft., [Bldg. Use 1 - Storage/Office] (a)  | 100                     | ---            | 10.0          | 0.540             | 0.540                         |
| Roof 2: Insulation Entirely Above Deck, [Bldg. Use 2 - Drive thru]   | 45                      | ---            | 30.0          | 0.032             | 0.032                         |
| Floor 2: Slab-On-Grade Unheated, Vertical 2 ft., [Bldg. Use 2 - Drive thru] (c)  | 36                      | ---            | 10.0          | 0.540             | 0.540                         |
| <b>NORTH</b>   |                         |                |               |                   |                               |
| Exterior Wall 3: Wood-Framed, 16" o.c., [Bldg. Use 1 - Storage/Office]   | 130                     | 21.0           | 0.0           | 0.062             | 0.064                         |
| <b>EAST</b>  |                         |                |               |                   |                               |
| Exterior Wall 4: Wood-Framed, 16" o.c., [Bldg. Use 2 - Drive thru]   | 42                      | 21.0           | 0.0           | 0.062             | 0.064                         |
| <b>SOUTH</b>   |                         |                |               |                   |                               |
| Exterior Wall 1: Wood-Framed, 16" o.c., [Bldg. Use 1 - Storage/Office]   | 130                     | 21.0           | 0.0           | 0.062             | 0.064                         |
| Exterior Wall 5: Wood-Framed, 16" o.c., [Bldg. Use 2 - Drive thru]   | 196                     | 21.0           | 0.0           | 0.062             | 0.064                         |
| Door 2: Glass (≥ 50% glazing), Metal Frame, Non-Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.40, PF 1.20, [Bldg. Use 2 - Drive thru] (b) | 21                      | ---            | ---           | 0.770             | 0.450                         |
| <b>WEST</b>  |                         |                |               |                   |                               |
| Exterior Wall 2: Wood-Framed, 16" o.c., [Bldg. Use 1 - Storage/Office]   | 571                     | 21.0           | 0.0           | 0.062             | 0.064                         |
| Door 1: Insulated Metal, Swinging, [Bldg. Use 1 - Storage/Office]  | 26                      | ---            | ---           | 0.330             | 0.610                         |

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.  
 (b) Fenestration product performance must be certified in accordance with NFRC and require supporting documentation.  
 (c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

**Envelope PASSES: Design 0.0% better than code**

**Envelope Compliance Statement**

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Mark Kurzynske, P.E.      *Mark Kurzynske*      10/28/21  
 Name - Title      Signature      Date

**COMcheck Software Version 4.1.5.1**  
**Mechanical Compliance Certificate**

**Project Information**

Energy Code: 2015 IECC  
 Project Title: Chick-fil-A #1634  
 Location: Fredericksburg (Fredericksburg (city)), Virginia  
 Climate Zone: 4a  
 Project Type: Addition

Construction Site: 1698 Carl D Silver Parkway, Fredericksburg, VA 20401  
 Owner/Agent: Chick-fil-A, 5200 Buffington Road, Atlanta, GA 30349  
 Designer/Contractor: Kurzynske & Associates, 2705 Lebanon Pike - Suite One, Nashville, TN 37214, 615-255-5203

**Mechanical Systems List**

**Quantity System Type & Description**

1 AC#1 (8.5 ton) (Single Zone):  
 Heating: 1 each - Central Furnace, Electric, Capacity = 154 kBtu/h  
 No minimum efficiency requirement applies  
 Cooling: 1 each - Single Package DX Unit, Capacity = 102 kBtu/h, Air-Cooled Condenser, Air Economizer  
 Proposed Efficiency = 12.20 EER, Required Efficiency: 11.20 EER + 12.8 IEER  
 Fan System: AC#1 | Dining - Compliance (Motor nameplate HP method) : Passes

Fans:  
 Supply Supply, Constant Volume, 3150 CFM, 2.0 motor nameplate hp, 0.0 fan efficiency grade  
 Exhaust Exhaust, Constant Volume, 750 CFM, 0.3 motor nameplate hp, 0.0 fan efficiency grade

1 AC#2 (25 ton) (Single Zone):  
 Heating: 1 each - Central Furnace, Electric, Capacity = 307 kBtu/h  
 No minimum efficiency requirement applies  
 Cooling: 1 each - Single Package DX Unit, Capacity = 282 kBtu/h, Air-Cooled Condenser, Air Economizer  
 Proposed Efficiency = 10.50 EER, Required Efficiency: 10.00 EER + 11.6 IEER  
 Fan System: AC#2 | Kitchen - Compliance (Motor nameplate HP method) : Passes

Fans:  
 Supply Supply, Constant Volume, 8500 CFM, 7.5 motor nameplate hp, 0.0 fan efficiency grade  
 Exhaust Exhaust, Constant Volume, 1900 CFM, 0.7 motor nameplate hp, 0.0 fan efficiency grade

1 AC#3 (10 ton) (Single Zone):  
 Heating: 1 each - Central Furnace, Electric, Capacity = 205 kBtu/h  
 No minimum efficiency requirement applies  
 Cooling: 1 each - Single Package DX Unit, Capacity = 124 kBtu/h, Air-Cooled Condenser, Air Economizer  
 Proposed Efficiency = 12.00 EER, Required Efficiency: 11.20 EER + 12.8 IEER  
 Fan System: AC#3 | Dining - Compliance (Motor nameplate HP method) : Passes

Fans:  
 Supply Supply, Constant Volume, 4000 CFM, 3.0 motor nameplate hp, 0.0 fan efficiency grade  
 Exhaust Exhaust, Constant Volume, 1000 CFM, 0.3 motor nameplate hp, 0.0 fan efficiency grade

1 AC#4 (7.5 ton) (Single Zone):  
 Heating: 1 each - Central Furnace, Electric, Capacity = 154 kBtu/h  
 No minimum efficiency requirement applies  
 Cooling: 1 each - Single Package DX Unit, Capacity = 91 kBtu/h, Air-Cooled Condenser, Air Economizer  
 Proposed Efficiency = 12.50 EER, Required Efficiency: 11.20 EER + 12.8 IEER  
 Fan System: AC#4 | Dining - Compliance (Motor nameplate HP method) : Passes

**Quantity System Type & Description**

Fans:  
 Supply Supply, Constant Volume, 2750 CFM, 2.0 motor nameplate hp, 0.0 fan efficiency grade  
 Exhaust Exhaust, Constant Volume, 600 CFM, 0.3 motor nameplate hp, 0.0 fan efficiency grade

1 AC#6 (5 ton) (Single Zone):  
 Heating: 1 each - Central Furnace, Electric, Capacity = 77 kBtu/h  
 No minimum efficiency requirement applies  
 Cooling: 1 each - Single Package DX Unit, Capacity = 63 kBtu/h, Air-Cooled Condenser, Air Economizer  
 Proposed Efficiency = 17.00 SEER, Required Efficiency: 14.00 SEER  
 Fan System: AC#5 | Drive Area - Compliance (Motor nameplate HP method) : Passes

Fans:  
 Supply Supply, Constant Volume, 2000 CFM, 1.0 motor nameplate hp, 0.0 fan efficiency grade  
 Exhaust Exhaust, Constant Volume, 300 CFM, 0.3 motor nameplate hp, 0.0 fan efficiency grade

1 AHU#1 (Single Zone):  
 Split System Heat Pump  
 Heating Mode: Capacity = 40 kBtu/h  
 Proposed Efficiency = 10.00 HSPF, Required Efficiency = 6.20 HSPF  
 Cooling Mode: Capacity = 34 kBtu/h  
 Proposed Efficiency = 16.20 SEER, Required Efficiency: 14.00 SEER  
 Fan System: None

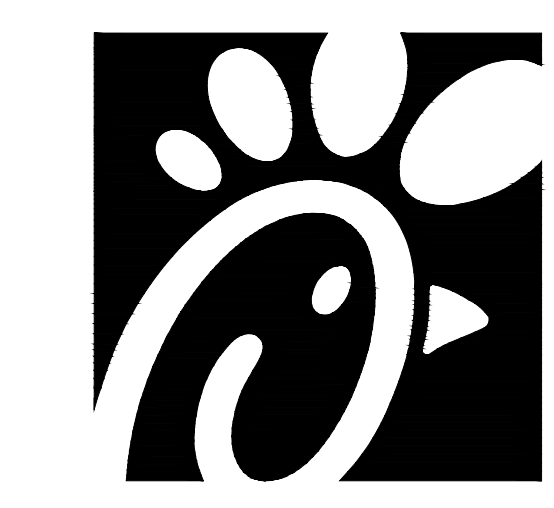
6 GH (Infrared Heater) (Single Zone):  
 Heating: 1 each - Radiant Heater, Propane, Capacity = 35 kBtu/h  
 No minimum efficiency requirement applies  
 Fan System: None

1 EH (Infrared Heater) (Single Zone):  
 Heating: 1 each - Radiant Heater, Electric, Capacity = 20 kBtu/h  
 No minimum efficiency requirement applies  
 Fan System: None

**Mechanical Compliance Statement**

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Mark Kurzynske, P.E.      *Mark Kurzynske*      2/24/22  
 Name - Title      Signature      Date



**Chick-fil-A**  
 5200 Buffington Road  
 Atlanta, Georgia 30349

**Kurzynske & Associates**  
 CONSULTING ENGINEERS  
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 Telephone: (615) 255-5203



**CHICK-FIL-A**  
**CENTRAL PARK**  
 1698 CARL D SILVER PKWY  
 FREDERICKSBURG, VA 22401-4924

**FSR#01634**  
 BUILDING TYPE / SIZE: S04-152  
 RELEASE: 21.05  
**REVISION SCHEDULE**

| NO. | DATE     | DESCRIPTION    |
|-----|----------|----------------|
| 1   | 01/21/22 | Gov't Comments |

**CONSTRUCTION**

CONSULTANT PROJECT # 21141.HF.R  
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 SHEET  
 MECH & ENVELOPE  
 COMCHECK  
 SHEET NUMBER

**M6.1**

# I. SECTION C15000 - MECHANICAL SPECIFICATIONS

## PART I - GENERAL

- 1.01 SCOPE
- A. IT IS THE RESPONSIBILITY OF CONTRACTOR TO READ ALL SPECIFICATIONS AND CONSULT ALL DRAWINGS WHICH MAY AFFECT THE INSTALLATION AND COORDINATION OF HIS WORK WITH OTHER TRADES. CONTRACTOR SHALL COORDINATE AND MAKE MINOR ADJUSTMENTS IN LOCATION OF EQUIPMENT AND MATERIALS AS NECESSARY TO SECURE COORDINATION.
- B. COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES, INCLUDING BUT NOT LIMITED TO THE LATEST APPROVED EDITIONS OF NFPA-96, NFPA-90A, NFPA-54, SMACNA, ASHRAE 90.1 AND ASHRAE 62.
- C. SYSTEM LAYOUT IS SCHEMATIC AND EXACT LOCATIONS SHALL BE DETERMINED BY STRUCTURAL CONDITIONS, COORDINATION WITH OTHER TRADES, COORDINATION WITH FINISHES AND OTHER CONDITIONS. STRUCTURAL SUPPORTS SHALL NOT BE CUT OR ALTERED TO ASSURE FIT OF HVAC SYSTEM. TEN FOOT CLEARANCE SHALL BE MAINTAINED BETWEEN OUTSIDE AIR INTAKES AND EXHAUST FANS AND PLUMBING VENT TERMINALS.
- D. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEFECTS, REPAIRS AND REPLACEMENTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER FINAL PAYMENT IS APPROVED. CONTRACTOR SHALL HONOR FACTORY WARRANTIES ON ALL EQUIPMENT PROVIDED AS PART OF THIS SYSTEM.
- E. UPON COMPLETION OF PROJECT, ALL SYSTEM EQUIPMENT AND MATERIALS SHALL BE IN NEW, CLEAN CONDITION WITH ALL DAMAGE RESTORED TO CONDITION ACCEPTABLE TO THE OWNERS REPRESENTATIVE. ALL EQUIPMENT, COMPONENTS AND DUCTWORK SHALL BE INSPECTED AND THOROUGHLY CLEANED, READY FOR USE. AT COMPLETION OF JOB, ALL MISCELLANEOUS TOOLS, SCAFFOLDING, SURPLUS MATERIALS, RUBBISH AND DEBRIS SHALL BE REMOVED BY CONTRACTOR.
- F. CONTRACTOR SHALL PROVIDE TWO SETS OF 2" MERV 8 OR HIGHER THROW AWAY TYPE FILTERS. A CLEAN SET SHALL BE PROVIDED PRIOR TO TEST AND BALANCE AND AGAIN PRIOR TO OPENING.

## PART II - PRODUCTS

- 2.01 HEATING AND COOLING EQUIPMENT (C15730)
- A. FURNISH AND INSTALL R-410A ROOFTOP SINGLE PACKAGE COMBINATION ELECTRIC COOLING AND ELECTRIC HEATING UNITS BY LENNOX AS SHOWN ON DRAWINGS. EQUIPMENT SHALL BE ARI CERTIFIED AND U.L. LISTED.
- B. ACCESSORIES SHALL INCLUDE LOW AND HIGH PRESSURE SAFETIES, CRANK CASE HEATER, OVERCURRENT AND OVERTEMPERATURE SAFETY, COMPRESSOR VIBRATION ISOLATORS, FILTER DRIERS, REFRIGERANT SERVICE VALVES, COIL HAIL GUARDS WHERE SCHEDULED, CONVENIENCE OUTLETS FACTORY INSTALLED ON SCHEDULED UNITS, UNIT MOUNTED NON-FUSED DISCONNECTS, LOW AMBIENT OPERATION DOWN TO 30 DEGREES F AND EVAPORATOR FREEZE STAT.
- C. COMPRESSORS SHALL BE FULLY HERMETIC SCROLL TYPE WITH INTERNAL VIBRATION ISOLATORS. COMPRESSORS SHALL BE PROVIDED WITH A MINIMUM FIVE (5) YEAR FULL WARRANTY.
- D. THE UNIT HEATING ELEMENTS SHALL BE BARE NICHROME WIRE EXPOSED TO THE AIR STREAM. HEATING CONTROLS SHALL INCLUDE TIME DELAY THAT SHALL BRING ELEMENTS ON AND OFF IN SEQUENCE WITH TIME DELAY BETWEEN EACH ELEMENT. HEATING SHALL BE PROVIDED IN TWO STAGES. LIMIT CONTROL SHALL PROVIDE OVERLOAD AND SHORT CIRCUIT PROTECTION. HEATER SHALL HAVE A ONE (1) YEAR WARRANTY.
- E. CHICK-FIL-A MAINTAINS A NATIONAL ACCOUNT FOR EQUIPMENT WITH LENNOX CORPORATION. PRICING FOR THE EQUIPMENT HAS BEEN ESTABLISHED IN ADVANCE. CONTACT LENNOX NATIONAL ACCOUNTS AT 972-497-6260 (OR BY FAX AT 972-497-5112) FOR PRICING, ORDERING AND AVAILABILITY.

## 2.02 DUCTWORK (C15735) (SEE DWG M2.1 FOR ADDITIONAL GREASE DUCT SYSTEM REQ.)

- A. ACCEPTABLE MANUFACTURERS OF INSULATION ARE MANVILLE, OWENS CORNING OR KNAUF.
- B. ALL DUCTWORK SHALL BE SHEET METAL, UNLESS NOTED OTHERWISE (U.N.O.).
- C. DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS, U.N.O.
- D. CONSTRUCTION OF DUCTWORK SHALL MEET SMACNA 1" W.C. PRESSURE CLASS STANDARD AND RECOMMENDATIONS. SMACNA SHALL BE FOLLOWED WITH RESPECT TO GAGE THICKNESS, JOINTS, REINFORCING, CONSTRUCTION, INSTALLATION AND SUPPORT FOR PRESSURE CLASS STATED. ALL TRANSVERSE JOINTS IN RECTANGULAR AND ROUND DUCT SHALL BE SEALED PER SMACNA SEAL CLASS C WITH U.L. DUCT MASTIC SEALANT APPROVED FOR INTENDED USE. DUCT TAPE IS NOT AN ACCEPTABLE SUBSTITUTE FOR MASTIC UNLESS EQUAL TO HARDCAST FOIL-GRIP 1402 BUTYL RUBBER ADHESIVE TAPE.
- E. ALL DUCT INSULATION SHALL MEET MINIMUM R-VALUE REQUIRED BY ASHRAE 90.1 LATEST EDITION. ALL DUCT WRAP SHALL BE MINIMUM 2" THICK, 3/4 PCF AND 5.6 R-VALUE INSTALLED WITH EITHER A VAPOR BARRIER WITH MAXIMUM PERMEANCE 0.05 OR A MINIMUM 2 MIL ALUMINUM REINFORCED FOIL/KRAFT FACING.
- F. ALL DUCT DROPS FROM THE ROOFTOP UNITS SHALL BE EXTERNALLY INSULATED.
- G. SUPPLY AND RETURN AIR DUCTWORK SERVING ALL AREAS SHALL BE EXTERNALLY INSULATED.
- H. ALL AIR CONVEYANCE COMPONENTS SUCH AS, BUT NOT LIMITED TO DUCT, DUCT PLENUMS, GRILLES/DIFFUSERS, BACK PANS, AND BOOTS SHALL BE INSULATED. INSULATION TYPE IS COVERED ELSEWHERE IN THIS SPECIFICATION.
- I. RESTROOM RECTANGULAR EXHAUST AIR DUCTWORK SHALL BE LINED WITH 1" THICK, 1-1/2 PCF INSULATION.
- J. TRUNK DUCTS SHALL BE ISOLATED FROM UNIT VIBRATION WITH THE USE OF NFPA AND U.L. APPROVED FLEXIBLE CONNECTORS INSTALLED AT THE TOP OF BOTH SUPPLY AND RETURN DROPS.
- K. INSULATED FLEXIBLE DUCT MAY BE UTILIZED FOR RUNOUTS TO GRILLES AND DIFFUSERS ONLY IN THE HORIZONTAL POSITION AND IN MAXIMUM LENGTHS OF 4'-0", NO EXCEPTIONS. SEE TAKE-OFF DETAIL ON DRAWING M3.1.
- L. CONSTRUCTION OF FLEXIBLE DUCTWORK SHALL INCLUDE SPIRAL METAL HELIX BONDED TO A POLYESTER CORE, FIBERGLASS INSULATION WITH POLYETHYLENE OR MYLAR VAPOR BARRIER. ALL COMPONENTS SHALL HAVE APPROPRIATE U.L. APPROVAL AND SHALL BE EQUIVALENT TO THERMAFLEX MKE.
- M. FLEXIBLE DUCT SHALL BE INSTALLED PER THE "ADC FLEXIBLE DUCT PERFORMANCE AND INSTALLATION STANDARDS, 4TH ED" USING FOIL TAPE AND DRAWBAND ON THE INNER CORE AND TAPE OR DRAWBAND ON THE OUTER JACKET.
- N. DUCT TAPE SHALL BE EQUAL TO FASSON 181-B FX, 2-1/2" WIDE.
- O. SINGLE THICKNESS TURNING VANES SHALL BE INSTALLED AT 90 DEGREE TURNS IN SUPPLY DUCTWORK WHERE ANY ONE DIMENSION IS GREATER THAN 12".
- P. RADIUSSED ELBOWS MAY BE SUBSTITUTED FOR 90 DEGREE ELBOWS AT THE DISCRETION OF THE CONTRACTOR. CENTERLINE RADIUS EQUAL TO: R=W PER FIGURE NO. 2-2 IN SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
- Q. EXTERNAL INSULATION ON BOTTOM OF DUCTS 24" OR WIDER SHALL BE SUPPORTED WITH STICK PINS ON 18" CENTERS. STICK PIN WASHERS SHALL BE COVERED WITH DUCT TAPE OR MASTIC.

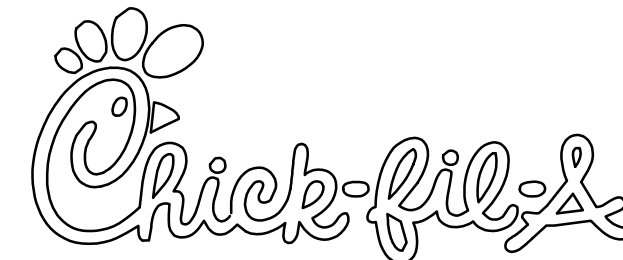
## 2.03 CONTROLS (C15735)

- A. SYSTEMS SHALL BE COMPLETE WITH CONNECTIONS TO EXISTING CFA-500 TEMPERATURE CONTROL PANEL AS MANUFACTURED BY SUNCOAST ENVIRONMENTAL CONTROLS (S.E.C.) (PH: 877-544-6679). CONTROL WIRING TERMINATIONS ARE BY THE MECHANICAL CONTRACTOR.
- B. THE SMOKE DETECTORS SHALL BE FACTORY INSTALLED AND WIRED BY THE ROOFTOP UNIT MANUFACTURER.
- C. A FACTORY INSTALLED SMOKE DETECTOR IN THE RETURN AIR SECTION OF EACH AIR CONDITIONING UNIT SHALL STOP THE INDOOR FAN AND CLOSE THE OUTSIDE AIR DAMPER IN THE EVENT OF EXCESSIVE TEMPERATURE OR SMOKE. SMOKE DETECTOR SHALL BE LOCATED PRIOR TO ANY EXHAUST FROM THE BUILDING OR MIXING WITH FRESH AIR MAKE-UP. UPON DETECTION, THE SYSTEM SHALL NOT RESTART UNTIL THE DEVICE IS MANUALLY RESET. DEVICES SHALL BE LOCATED WHERE THEY CAN BE EASILY ACCESSED AND WHERE CLEAR OF FILTERS.
- D. CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH SUNCOAST ENVIRONMENTAL CONTROLS FOR THE SMOKE DETECTOR TEST/RESET ANNUNCIATOR STATIONS. THE TEST/RESET STATIONS WILL BE PURCHASED AND INSTALLED BY THE MECHANICAL CONTRACTOR AS A PART OF A NATIONAL ACCOUNT PACKAGE.
- E. THE REMOTE TEST/RESET ANNUNCIATORS SHALL BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR. INSTALLATION BY MECHANICAL SHALL INCLUDE MOUNTING OF THE ANNUNCIATORS AND ALL WIRING FROM EACH DEVICE TO THE RTU OR AHU. PROVIDE A JUNCTION BOX IN THE WALL WITH 1/2" CONDUIT STUBBED UP ABOVE THE CEILING FOR EACH REMOTE TEST STATION. ANNUNCIATOR SHALL BE SUNCOAST CONTROLS REMOTE TEST/RESET STATION WITH POWER LED, TROUBLE LED, ALARM LED, 90DB HORN AND TEST/RESET BUTTON.
- F. THE RESTROOM FAN SHALL BE INTERLOCKED TO THE LIGHTS SERVING THE MEN AND WOMEN'S RESTROOMS. THE HOOD FANS SHALL BE CONTROLLED VIA THE SUNCOAST CFA-500 CONTROL PANEL. WIRING, RELAYS AND SWITCHES FOR CONTROL OF ALL FANS ARE BY ELECTRICAL CONTRACTOR.
- G. LENNOX UNITS - THERMOSTATS ARE PROVIDED AND INTEGRATED INTO THE TEMPERATURE CONTROL PANEL BY SUNCOAST ENVIRONMENT CONTROLS. SUNCOAST WILL PROVIDE A NETWORK THERMOSTAT US32-CFA TSTAT PRE-WIRED IN THE TEMPERATURE CONTROL PANEL. A REMOTE TEMPERATURE SENSOR FOR EACH THERMOSTAT IS ALSO PROVIDED. SOME UNITS MAY HAVE MORE THAN ONE SENSOR. MECHANICAL CONTRACTOR SHALL INSTALL ALL WIRING BETWEEN THE THERMOSTAT, THE REMOTE SENSOR AND THE ROOFTOP UNIT OR AHU.
- H. MECHANICAL CONTRACTOR SHALL INSTALL CONTROL WIRING IN 1/2" CONDUIT WHERE REQUIRED BY CODE. WHERE NOT REQUIRED TO BE IN CONDUIT, ALL WIRING SHALL BE RUN PARALLEL TO STRUCTURAL MEMBERS OR PERPENDICULAR WITH NO DIAGONAL ROUTING. ALL WIRING SHALL BE SECURED TO THE FRAMING TO PREVENT SAGGING IN RUNS. WIRING TO ROOFTOP UNITS SHALL BE ROUTED THROUGH THE FACTORY THRU-BASE FITTING IN THE UNIT BASE. NO SPLICING OF WIRING WILL BE ACCEPTED. ALL WIRING ABOVE THE ROOF SHALL BE INSTALLED IN EXTERIOR GRADE FLEXIBLE CONDUIT. ALL CONTROL WIRING AND CONTROL WIRING CONDUIT SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. WIRING SHALL BE INSTALLED IN ACCORDANCE WITH LATEST EDITION OF NEC. ALL LOW VOLTAGE CONTROL WIRING SHALL BE NO LESS THAN 18 AWG MIN. CONTROL WIRING CONDUCTORS SHALL BE SIZED TO ACCOUNT FOR LOAD AND LENGTH OF RUN TO ALLOW SUFFICIENT VOLTAGE AVAILABLE AT CONTROLLED DEVICE TO OPERATE THE SYSTEM RELIABLY.

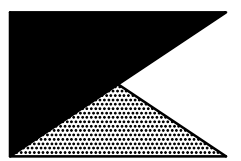
## PART III - EXECUTION

- 3.01 SCOPE
- A. FURNISH AND INSTALL SYSTEM IN ACCORDANCE WITH REFERENCED STANDARDS, APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED ON DRAWINGS.
- B. OWNER SHALL TEST AND BALANCE MECHANICAL SYSTEM IN ACCORDANCE WITH NCI OR AABC STANDARDS TO ASSURE CONFORMANCE WITH DESIGN. G.C. WILL MAKE MECHANICAL CONTRACTOR AVAILABLE DURING TEST AND BALANCE TO ASSIST TESTING AGENCY AND TO MAKE CORRECTIONS IMMEDIATELY NECESSARY. CONTRACTOR SHALL CORRECT ITEMS ON WRITTEN TEST AND BALANCE REPORT.
- C. CONTRACTOR SHALL INSTRUCT THE OWNER'S REPRESENTATIVE IN ALL MATTERS PERTAINING TO THE PROPER MAINTENANCE OF EQUIPMENT FURNISHED UNDER THIS CONTRACT THROUGH DEMONSTRATION AND EXPLANATION OF OPERATING & MAINTENANCE MANUALS.
- D. CONTRACTOR SHALL PROVIDE A "SAMPLE MAINTENANCE PROPOSAL" TO THE OWNER'S REPRESENTATIVE IN ALL MATTERS PERTAINING TO THE PROPER MAINTENANCE OF EQUIPMENT FURNISHED UNDER THIS CONTRACT.
- E. CONTRACTOR SHALL COMPLETE A/C EQUIPMENT STARTUP DOCUMENTATION PROVIDED BY OWNER.

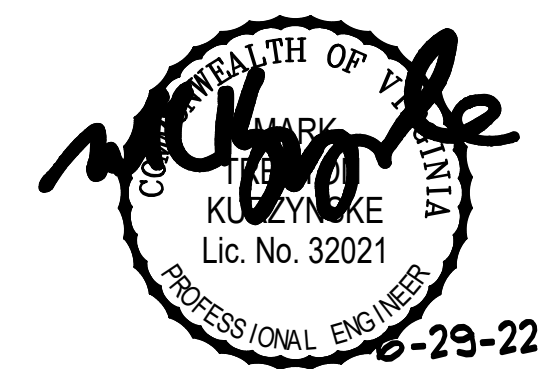
| NATIONAL ACCOUNTS |  |
|-------------------|--|
| 1.                | LENNOX EQUIPMENT - CONTACT LENNOX NATIONAL ACCOUNTS AT 800-367-6285 (OR BY FAX AT 972-497-5112) FOR PRICING, ORDERING AND AVAILABILITY. LENNOX EQUIPMENT NOT PURCHASED THRU LENNOX NATIONAL ACCOUNTS WILL NOT BE ACCEPTED.   |
| 2.                | LOREN COOK FAN AND CURB PACKAGE - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE FAN/CURB PACKAGE DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. FANS AND CURBS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED. |
| 3.                | PRICE AIR DEVICES - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE AIR DEVICES DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. AIR DEVICES NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.                       |
| 4.                | AIR DOORS - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE AIR DOORS DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. AIR DOORS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.                                   |
| 5.                | HALTON HOODS - CHICK-FIL-A WILL PURCHASE AND PROVIDE THE HOODS FOR INSTALLATION BY THE MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR RECEIVING THE HOODS. CONTACT HALTON CO. AT 270-237-5600 FOR MORE INFO.  |
| 6.                | ROYAL METAL PRODUCTS START COLLARS - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE START COLLARS DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. START COLLARS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.  |
| 7.                | SCHWANK INFRARED HEATER PACKAGE - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE HEATER PACKAGE DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. HEATERS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.          |
| 8.                | CIRCULATING FAN PACKAGE - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE FAN PACKAGE DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. FANS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.                        |
| 9.                | BROMIC ELECTRIC HEATER PACKAGE - THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE HEATER DIRECTLY FROM BROMIC COMPANY. CONTACT MR. FRANK SARVER AT 858-400-4063 FOR PRICING AND AVAILABILITY. HEATERS NOT PURCHASED THRU BROMIC COMPANY WILL NOT BE ACCEPTED.                           |



**Chick-fil-A**  
5200 Buffington Road  
Atlanta, Georgia 30349



**Kurzynske & Associates**  
CONSULTING ENGINEERS  
2705 Lebanon Pike - Suite One  
Nashville, Tennessee 37214  
Telephone: (615) 255-5203



**CHICK-FIL-A**  
**CENTRAL PARK**

1698 CARL D SILVER PKWY  
FREDERICKSBURG, VA 22401-4924

**FSR#01634**

|                          |          |                |
|--------------------------|----------|----------------|
| BUILDING TYPE / SIZE:    | S04-152  |                |
| RELEASE:                 | 21.05    |                |
| <b>REVISION SCHEDULE</b> |          |                |
| NO.                      | DATE     | DESCRIPTION    |
| 1                        | 01/21/22 | Gov't Comments |

|                      |              |
|----------------------|--------------|
| CONSULTANT PROJECT # | 21141.HF.R   |
| PRINTED FOR          | CONSTRUCTION |
| DATE                 | 10/28/2021   |
| DRAWN BY             | DSF          |

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SHEET  
MECHANICAL  
SPECIFICATIONS  
SHEET NUMBER

**M7.1**

**MODEL: KVL-2-IC**

**STANDARD FEATURES**

- S.S. FILTERS (KSA) 4
- 1/2 S.S. FILTERS (KSA) 1
- CAPTURE-JET \*
- STAND-OFF \*
- L.E.D. LIGHTS 3

**OPTIONS**

- REMOTE SWITCH PANEL \*
- FIRE PROTECTION \*
- ETL LISTED V/D EXHAUST DAMPER \*
- CEILING CLOSURE 2
- STD. BACKSPASH \*
- INSULATED BACKSPASH \*
- MBD DAMPER \*

**MATERIAL**

EXPOSED SURFACES 18 GA. S.S.

ALL 18 GA. S.S.

COMMENTS:

- CLOSURE HEIGHT = 68" (TWO SIDES)
- CEILING HEIGHT = 124"
- CEILING CLOSURE RECESSED 11" FROM FRONT TO CREATE SHELF

FRONT CLOSURE PANEL WITH 18"x24" ACCESS DOOR LEFT SIDE (ACCESS TO CAPTURE-JET & MBD DAMPER)

18"x18" ACCESS DOOR RIGHT SIDE (ACCESS TO CAPTURE-JET & MBD DAMPER)

CONTINUOUS CAPTURE INTERNAL RIGHT END OUTLET

8" REAR STAND-OFF TO HAVE 1" THICK INSULATION

NOTCHED LEFT END PANEL

EQUIPMENT COVERED (2) FRYERS

(1) GRILL

AMEREX WEIGHT = 60 LBS

HOOD WEIGHT = 600 LBS

| DATE  | DWG. NO.   | ITEM NO. | EXHAUST AIR INFORMATION |
|---|------------|----------|-------------------------|
| 10.21.21  | U21-717-01 | H-1L     | CFM TAB SP              |
| PROJECT: CHICK-FIL-A #1634 CENTRAL PARK           |            |          | 1080 .13' .24'          |
| LOCATION: FREDERICKSBURG, VA                      |            |          | CAPTURE AIR INFORMATION |
|   |            |          | CFM SP                  |
| SUBMITTED BY: HALTON CO.                          |            |          | 72 .30'                 |
| K FACTOR EQUATION: CFM = K FACTOR * $\sqrt[3]{V}$ |            |          | K FACTOR = 3043         |

**Halton**

**MODEL: KVL-2-IC**

**STANDARD FEATURES**

- S.S. FILTERS (KSA) 3
- 1/2 S.S. FILTERS (KSA) 1
- CAPTURE-JET \*
- STAND-OFF \*
- L.E.D. LIGHTS 2

**OPTIONS**

- REMOTE SWITCH PANEL \*
- FIRE PROTECTION \*
- ETL LISTED V/D EXHAUST DAMPER \*
- CEILING CLOSURE 2
- STD. BACKSPASH \*
- INSULATED BACKSPASH \*
- MBD DAMPER \*

**MATERIAL**

EXPOSED SURFACES 18 GA. S.S.

ALL 18 GA. S.S.

COMMENTS:

- CLOSURE HEIGHT = 68" (TWO SIDES)
- CEILING HEIGHT = 124"
- CEILING CLOSURE RECESSED 11" FROM FRONT TO CREATE SHELF

90"x24" ACCESS DOOR LEFT SIDE FOR ACCESS TO CAPTURE-JET BY FRONT OJ INTAKE & MBD DAMPER

24"x24" ACCESS DOOR RIGHT SIDE FOR ACCESS TO AMEREX TANK

CONTINUOUS CAPTURE INTERNAL LEFT END OUTLET

3" REAR STAND-OFF TO HAVE 1" THICK INSULATION

EQUIPMENT COVERED (2) FRYERS

(1) GRILL

AMEREX WEIGHT = 60 LBS

HOOD WEIGHT = 482 LBS

| DATE  | DWG. NO.   | ITEM NO. | EXHAUST AIR INFORMATION |
|---|------------|----------|-------------------------|
| 10.21.21  | U21-717-01 | H-1R     | CFM TAB SP              |
| PROJECT: CHICK-FIL-A #1634 CENTRAL PARK           |            |          | 832 .12' .23'           |
| LOCATION: FREDERICKSBURG, VA                      |            |          | CAPTURE AIR INFORMATION |
|   |            |          | CFM SP                  |
| SUBMITTED BY: HALTON CO.                          |            |          | 55 .30'                 |
| K FACTOR EQUATION: CFM = K FACTOR * $\sqrt[3]{V}$ |            |          | K FACTOR = 2348         |

**Halton**

**MODEL: KVL-C-IC**

**STANDARD FEATURES**

- S.S. FILTERS (KSA) 2
- CAPTURE-JET \*
- STAND-OFF \*
- L.E.D. LIGHTS 1

**OPTIONS**

- REMOTE SWITCH PANEL \*
- FIRE PROTECTION \*
- ETL LISTED V/D EXHAUST DAMPER \*
- CEILING CLOSURE 2
- STD. BACKSPASH \*
- INSULATED BACKSPASH \*
- MBD DAMPER \*

**MATERIAL**

EXPOSED SURFACES 18 GA. S.S.

ALL 18 GA. S.S.

COMMENTS:

- CLOSURE HEIGHT = 68" (TWO SIDES)
- CEILING HEIGHT = 124"
- CEILING CLOSURE RECESSED 10" FROM FRONT TO CREATE SHELF

18"x18" ACCESS DOOR CENTERED AT CAPTURE-JET

18" FRONT OJ INTAKE

COVERIZED NOTCHED LEFT END PANEL

DOUBLE RECEPTACLE PIN & SLEEVE

3" X 3" TRIM STRIP FOR STAND-OFF ON RIGHT END

3" SIDE & REAR STAND-OFF TO HAVE 1" THICK INSULATION

EQUIPMENT COVERED (2) FRYERS

HOOD WEIGHT = 282 LBS

| DATE  | DWG. NO.   | ITEM NO. | EXHAUST AIR INFORMATION |
|---|------------|----------|-------------------------|
| 10.21.21  | U21-717-01 | H-2      | CFM T.A.B. SP           |
| PROJECT: CHICK-FIL-A #1634 CENTRAL PARK           |            |          | 701 .30' .39'           |
| LOCATION: FREDERICKSBURG, VA                      |            |          | CAPTURE AIR INFORMATION |
|   |            |          | CFM SP                  |
| SUBMITTED BY: HALTON CO.                          |            |          | 30 .29'                 |
| K FACTOR EQUATION: CFM = K FACTOR * $\sqrt[3]{V}$ |            |          | K FACTOR = 1291         |

**Halton**

**MODEL: KVL-C-IC**

**STANDARD FEATURES**

- S.S. FILTERS (KSA) 2
- CAPTURE-JET \*
- STAND-OFF \*
- L.E.D. LIGHTS 1

**OPTIONS**

- REMOTE SWITCH PANEL \*
- FIRE PROTECTION \*
- ETL LISTED V/D EXHAUST DAMPER \*
- CEILING CLOSURE 3
- STD. BACKSPASH \*
- INSULATED BACKSPASH \*
- MBD DAMPER \*

**MATERIAL**

EXPOSED SURFACES 18 GA. S.S.

ALL 18 GA. S.S.

COMMENTS:

- CLOSURE HEIGHT = 68" (TWO SIDES)
- CEILING HEIGHT = 124"
- CEILING CLOSURE RECESSED 10" FROM FRONT TO CREATE SHELF

18"x18" ACCESS DOOR CENTERED AT CAPTURE-JET

18" FRONT OJ INTAKE

COVERIZED NOTCHED RIGHT END PANEL

DOUBLE RECEPTACLE PIN & SLEEVE

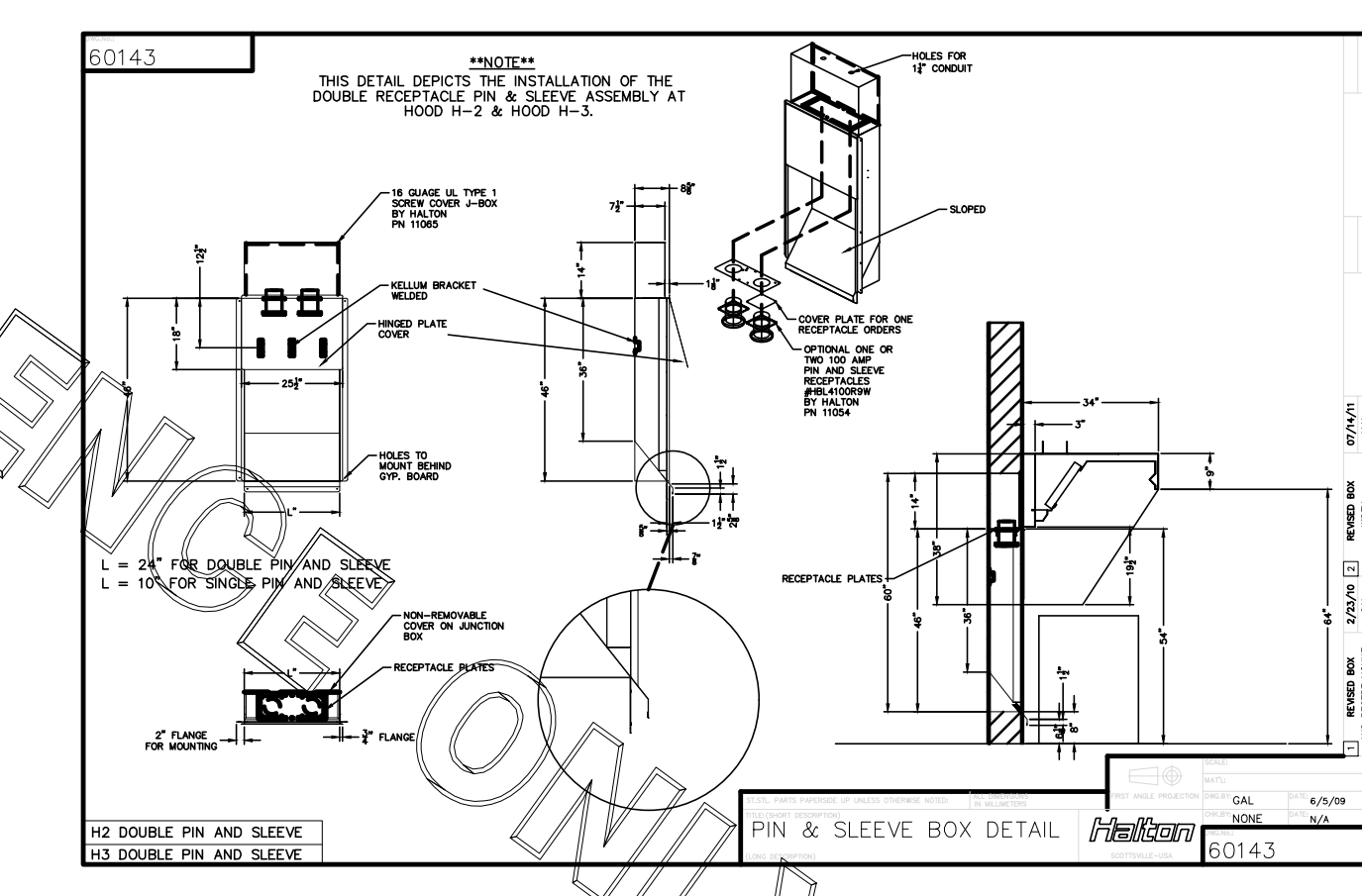
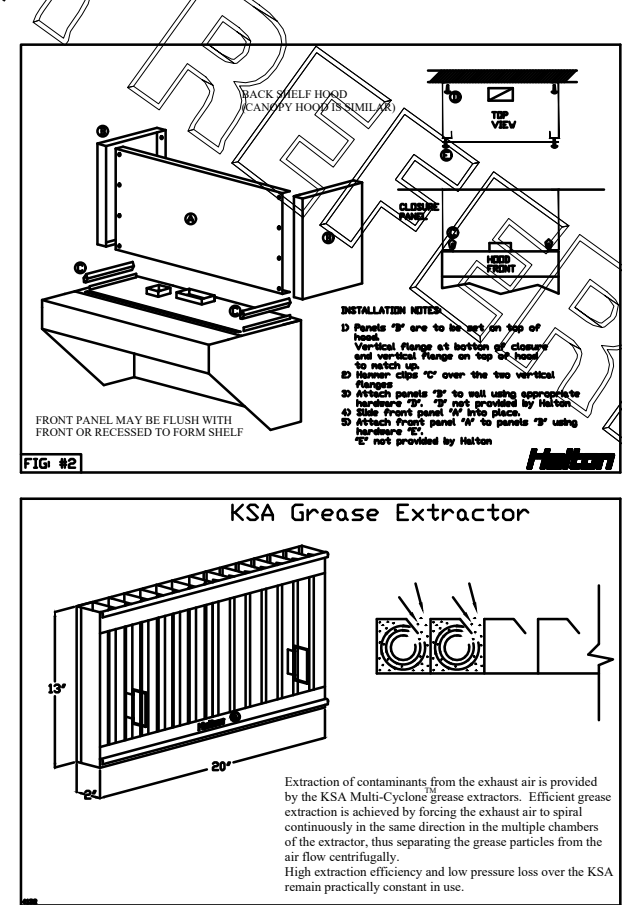
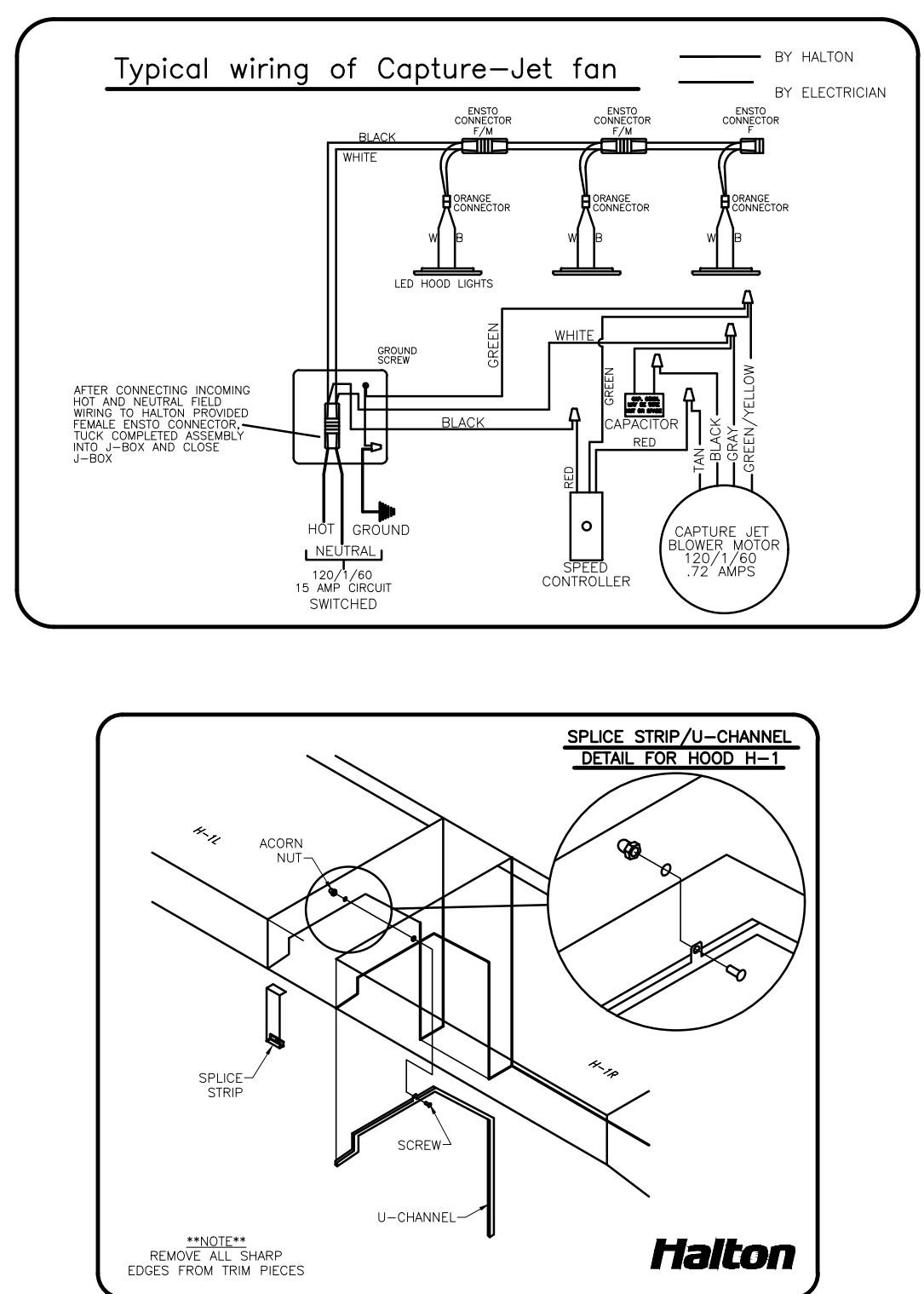
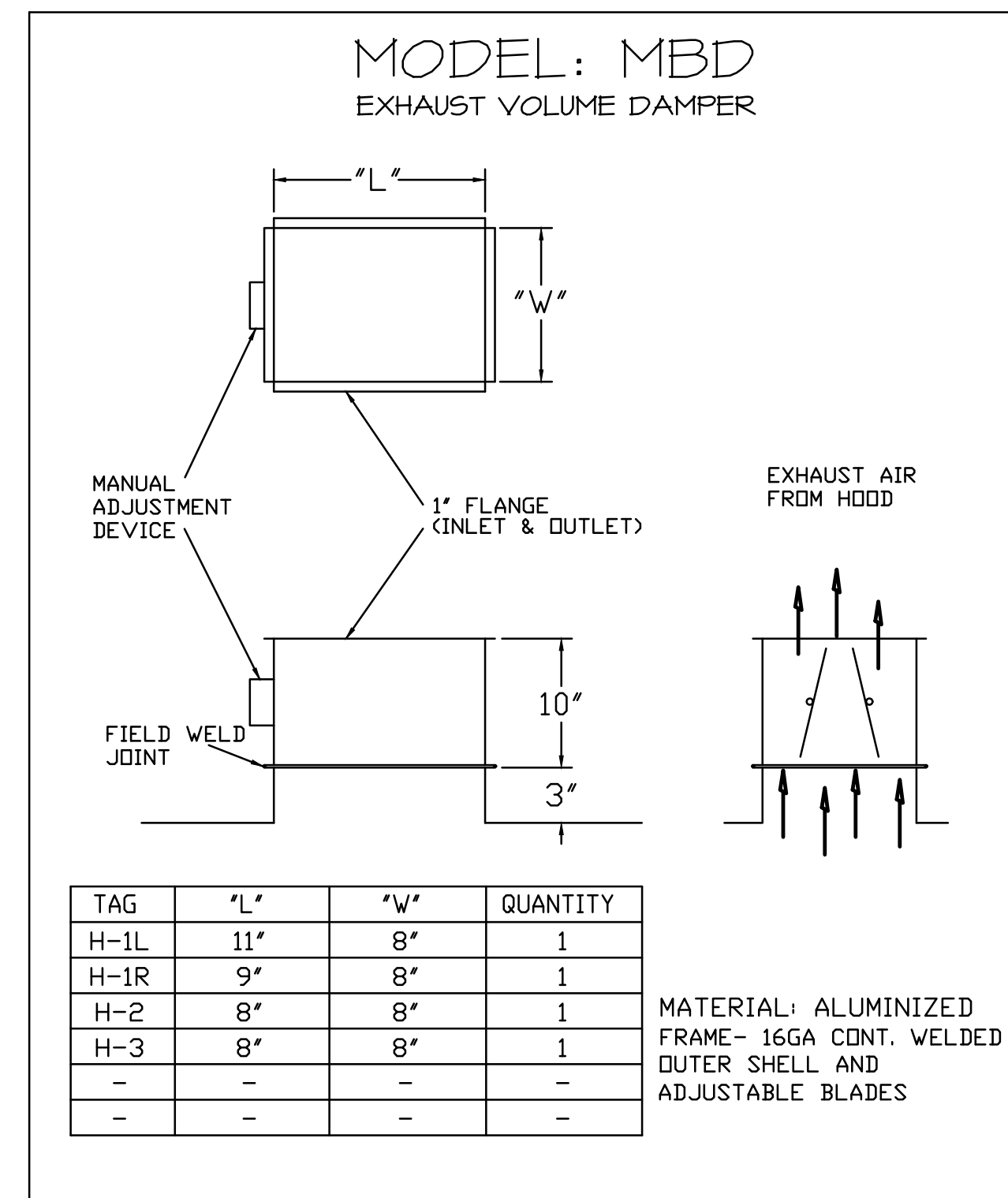
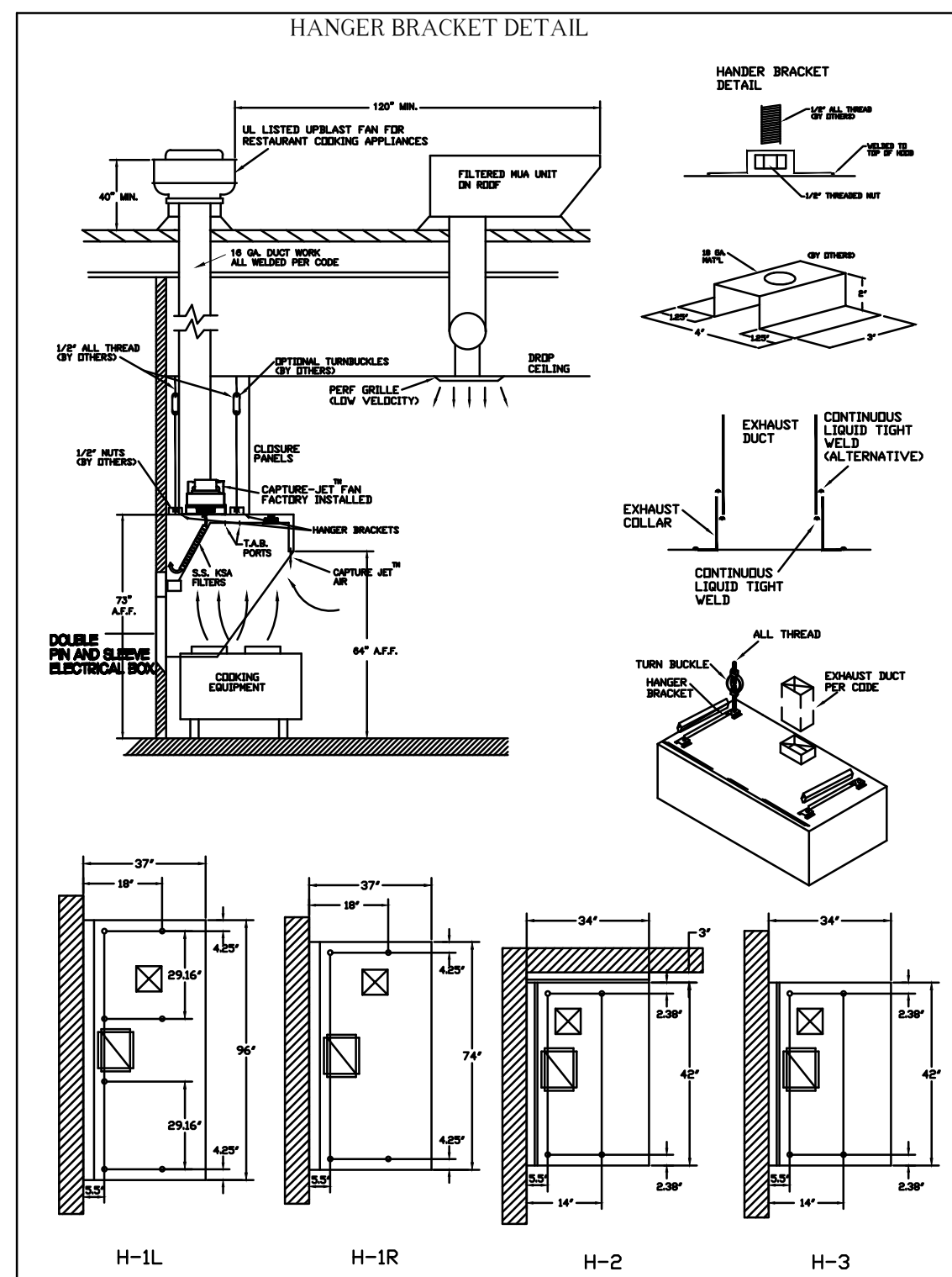
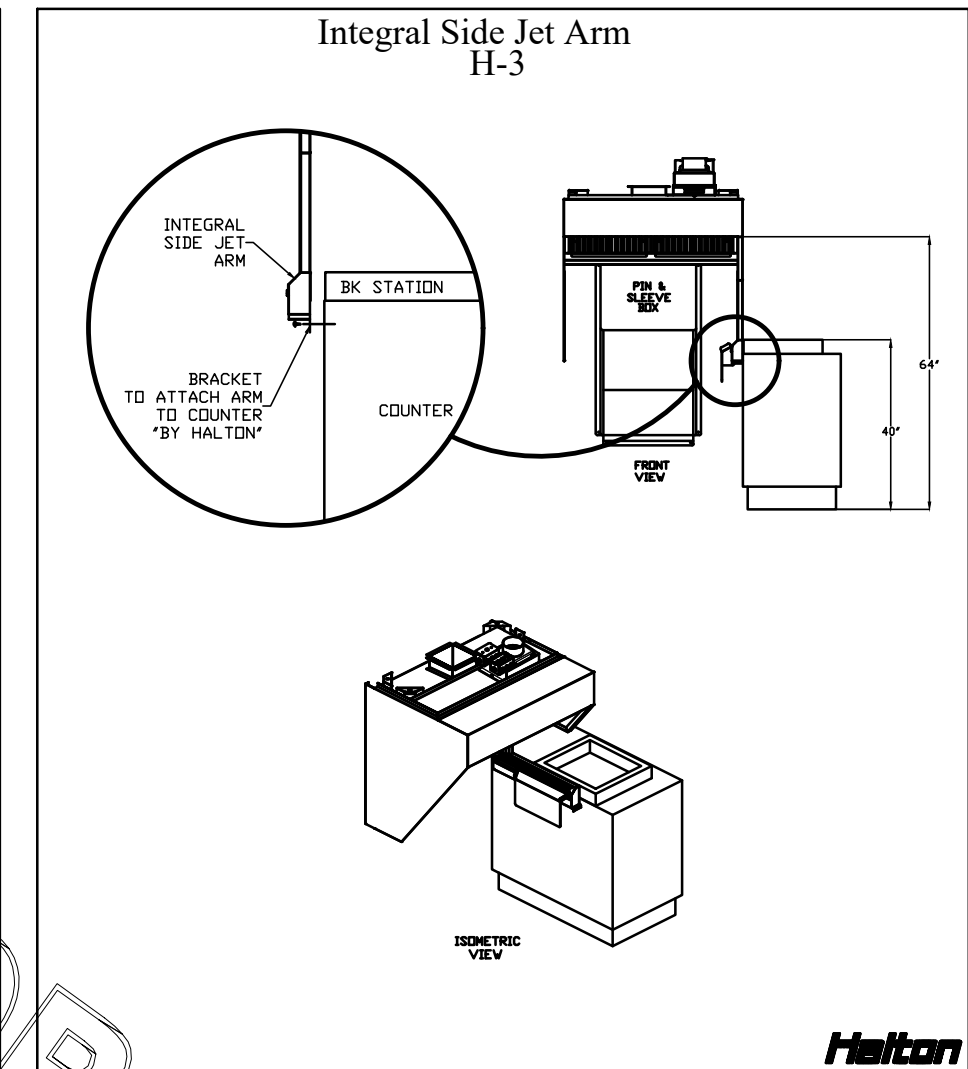
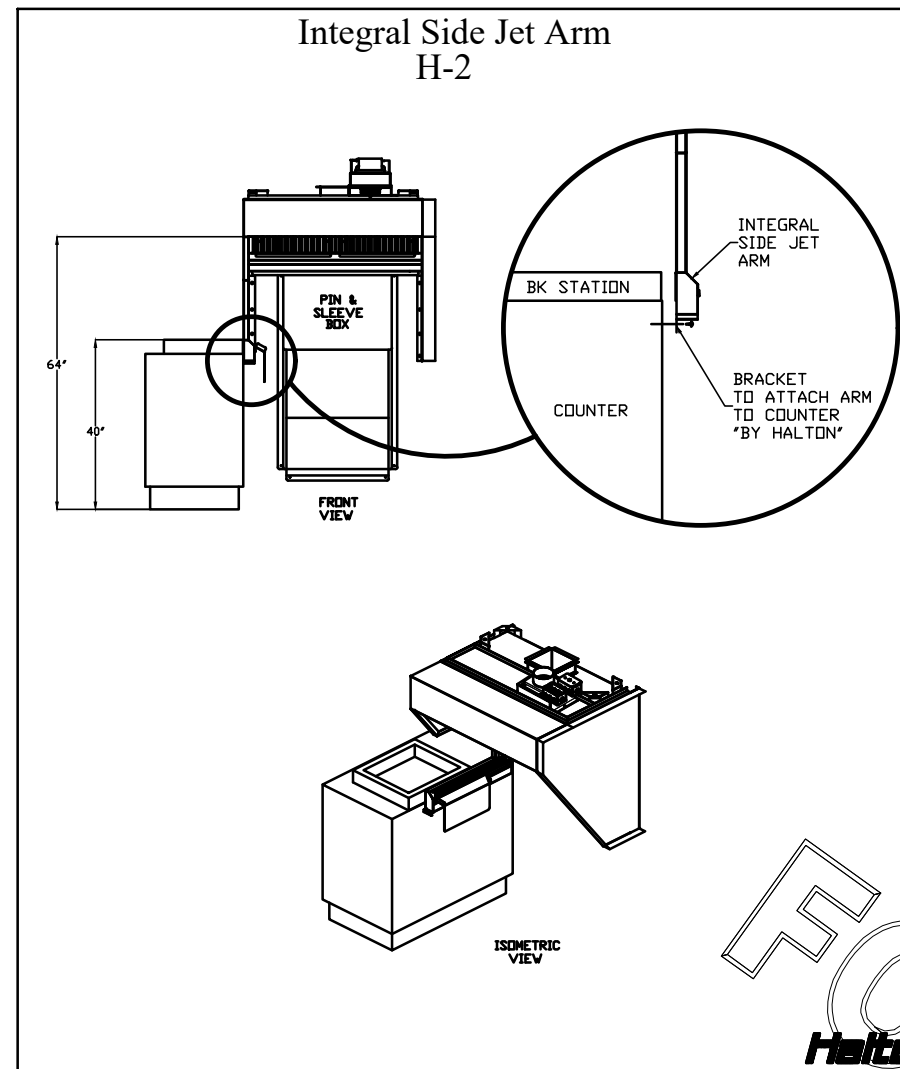
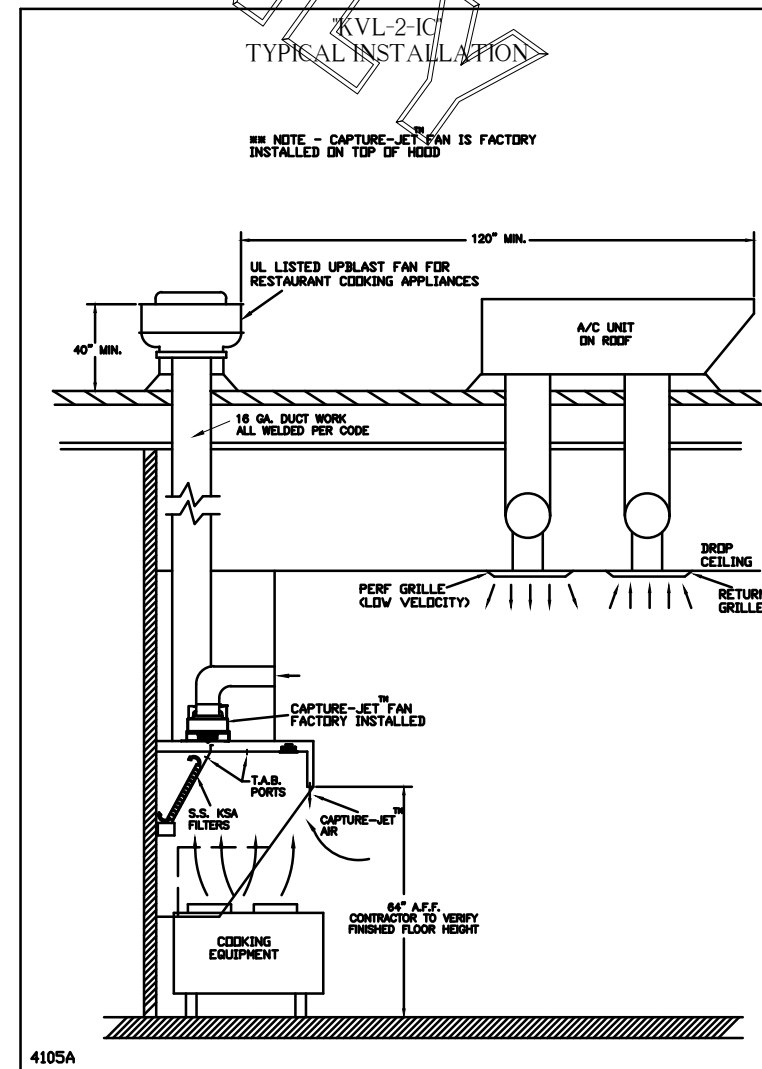
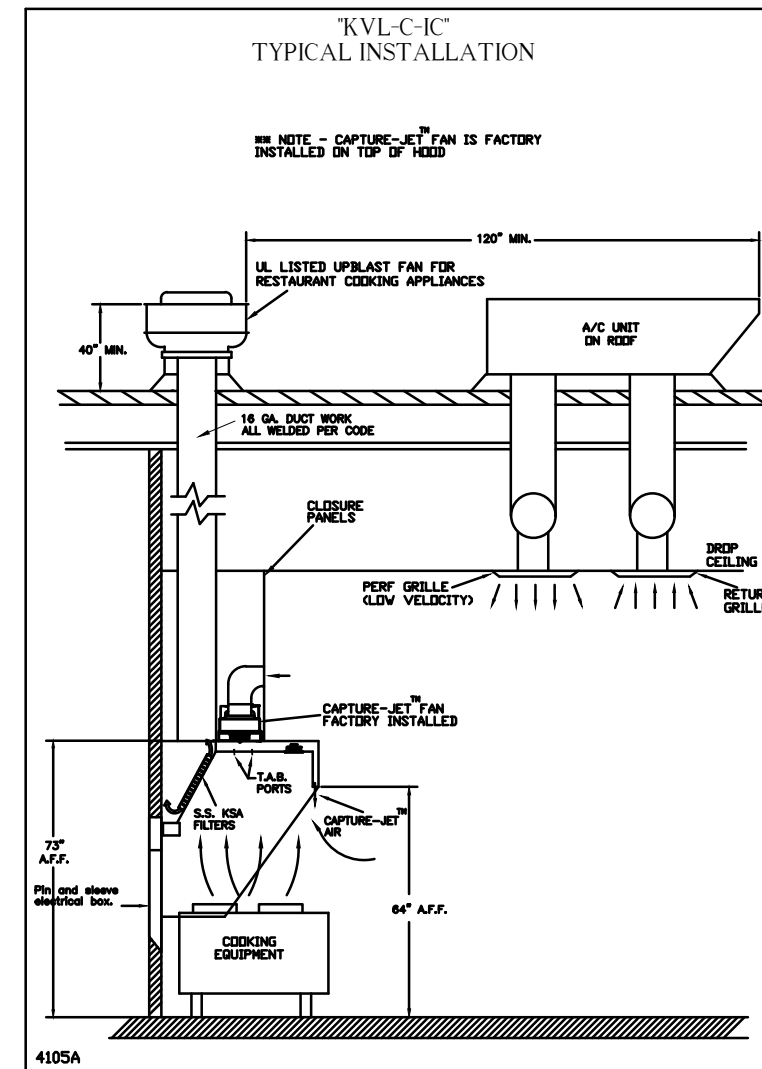
3" REAR SIDE STAND-OFF TO HAVE 1" THICK INSULATION

EQUIPMENT COVERED (2) FRYERS

HOOD WEIGHT = 245 LBS

| DATE  | DWG. NO.   | ITEM NO. | EXHAUST AIR INFORMATION |
|---|------------|----------|-------------------------|
| 10.21.21  | U21-717-01 | H-3      | CFM T.A.B. SP           |
| PROJECT: CHICK-FIL-A #1634 CENTRAL PARK           |            |          | 701 .30' .39'           |
| LOCATION: FREDERICKSBURG, VA                      |            |          | CAPTURE AIR INFORMATION |
|   |            |          | CFM SP                  |
| SUBMITTED BY: HALTON CO.                          |            |          | 30 .29'                 |
| K FACTOR EQUATION: CFM = K FACTOR * $\sqrt[3]{V}$ |            |          | K FACTOR = 1291         |

**Halton**



HALTON HOODS - ETL LISTED PER LATEST 710 STANDARD - BUILT PER NFPA 96 - NSF LISTED

**NSF Halton**

HALTON COMPANY, 38 INDUSTRIAL DR., SCOTTSVILLE, KY 40564

MODEL NO. SERIAL NO. ITEM NO.

GENERAL REQUIREMENTS

FLAVOR FREE COOKING OILS FOR DOMESTIC AND INDUSTRIAL USE ONLY

SELECTION REQUIREMENTS

FLAVOR FREE COOKING OILS FOR DOMESTIC AND INDUSTRIAL USE ONLY

THE USER IS ADVISED THAT HALTON HOODS ARE NOT DESIGNED TO BE USED AS A REFRIGERATOR OR TO STORE FOODS.

LET SUPPLY AND PLAY SHALL ONLY BE SET AT 100%.

| REV. | DATE     | DESCRIPTION         |
|------|----------|---------------------|
| 1    | 10.21.21 | REVISED FOR RELEASE |
| 2    |          |                     |
| 3    |          |                     |
| 4    |          |                     |
| 5    |          |                     |
| 6    |          |                     |
| 7    |          |                     |

THIS DRAWING MUST BE CHECKED, SIGNED AND RETURNED TO THE APPROPRIATE FACTORY. PLEASE VERIFYING THE FOLLOWING:

- ALL DIMENSIONAL INFORMATION, MOUNTING POSITIONS AND CLEARANCES.
- THE LOCATION AND TYPE OF COOKING EQUIPMENT.

**NOTE TO APPROVER**

ANY CHANGES IN COOKING EQUIPMENT, SUCH AS INCREASED ENERGY INPUTS OR EQUIPMENT CHANGES, OCCURRING AFTER THE DRAWING IS APPROVED, WILL REQUIRE A REVISION OF THESE CHANGES. A RECALCULATION OF EXHAUST AIRFLOW MAY BE REQUIRED.

REVISION AND RESUBMIT  WITH NO CHANGES  WITH CHANGES AS NOTED

APPROVED FOR FABRICATION  APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

MAIL APPROVED DRAWINGS TO APPROPRIATE FACTORY BELOW: WEBSITE: WWW.HALTONCOMPANY.COM

HALTON CO. (CANADA) 1021 BREVIK PLACE MISSISSAUGA, ON L4W 3R7 1-905-624-0301

HALTON CO. (USA) 101 INDUSTRIAL DRIVE SCOTTSVILLE, KY 42164 1-270-237-5600

PROJECT: CHICK-FIL-A #1634 CENTRAL PARK

LOCATION: FREDERICKSBURG, VA

DATE: 10.21.21

SCALE: NTS

Halton Dwg: U21-717-01

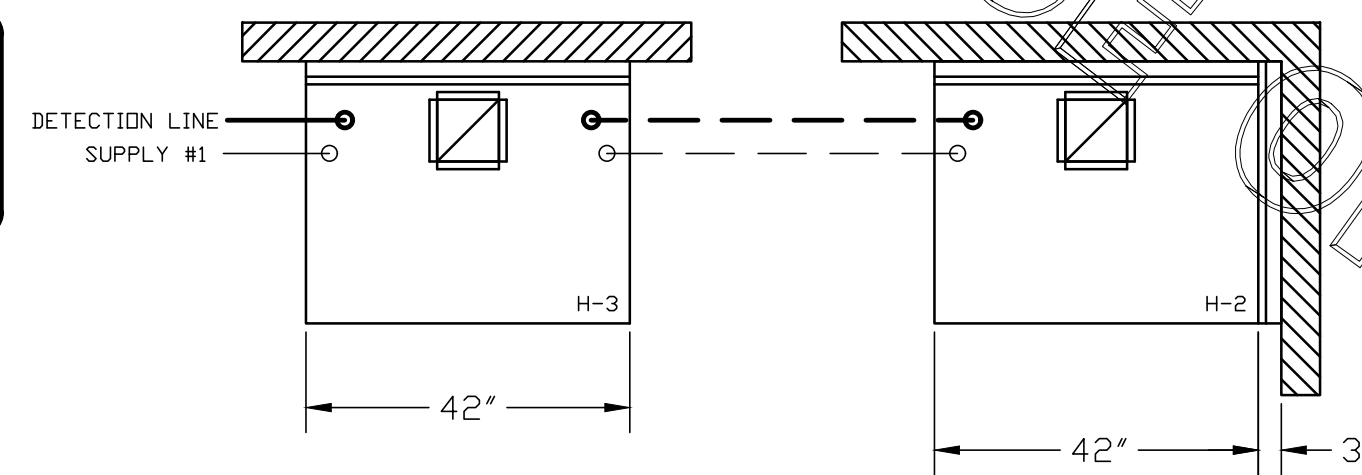
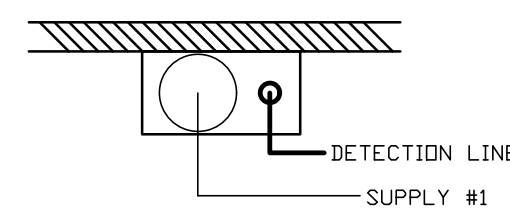
**Halton** CARE FOR INDOOR AIR

Sheet **MH1.1**

FOR REFERENCE ONLY

**\*\*PROTECTS HOODS H-2 & H-3\*\***

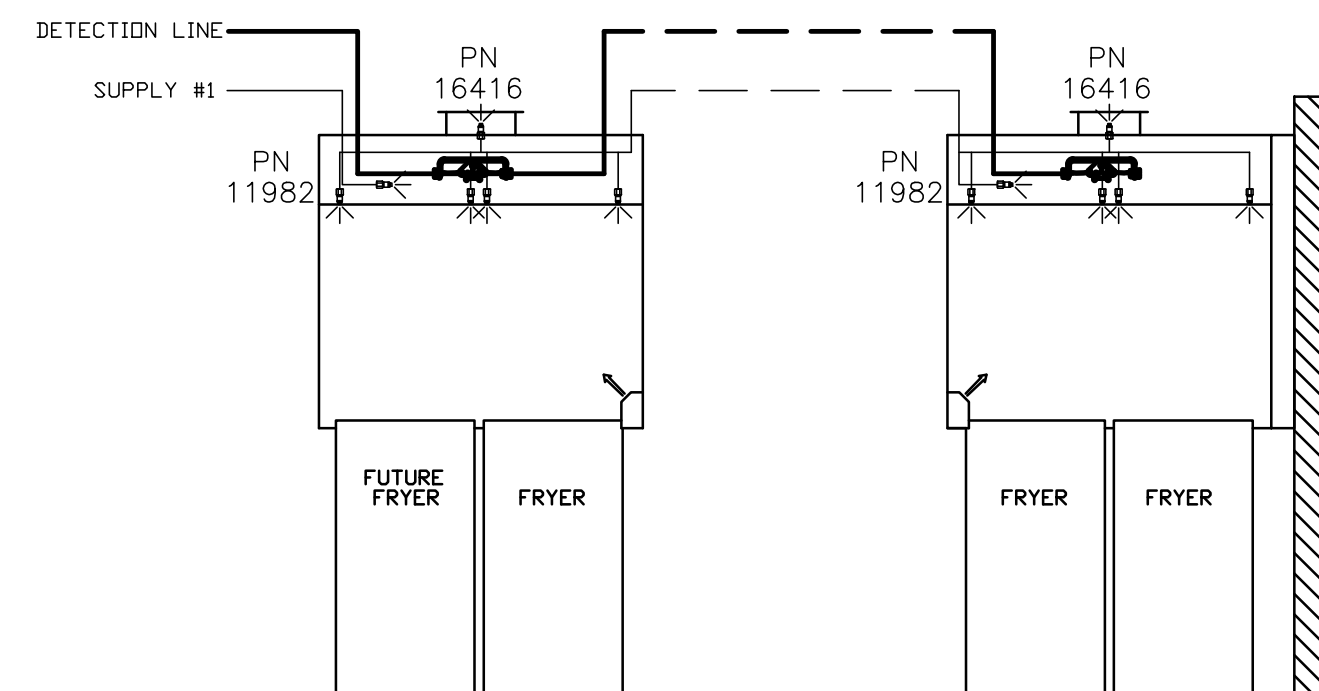
- REMOTE MOUNTED:  
 (1) SYSTEM ENCLOSURE W/  
 (1) MECHANICAL RELEASE MODULE  
 (1) KP475 AGENT CYLINDER (4.75 GALLON TANK)



- AMEREX FIRE SYSTEM  
 (1) SYSTEM ENCLOSURE  
 (1) MECHANICAL RELEASE MODULE  
 (2) EXTRA MICRO SWITCH ASSEMBLIES (MOUNTED IN MECHANICAL REL. MODULE)  
 (1) KP475 AGENT CYLINDERS (4.75 GALLON TANK)

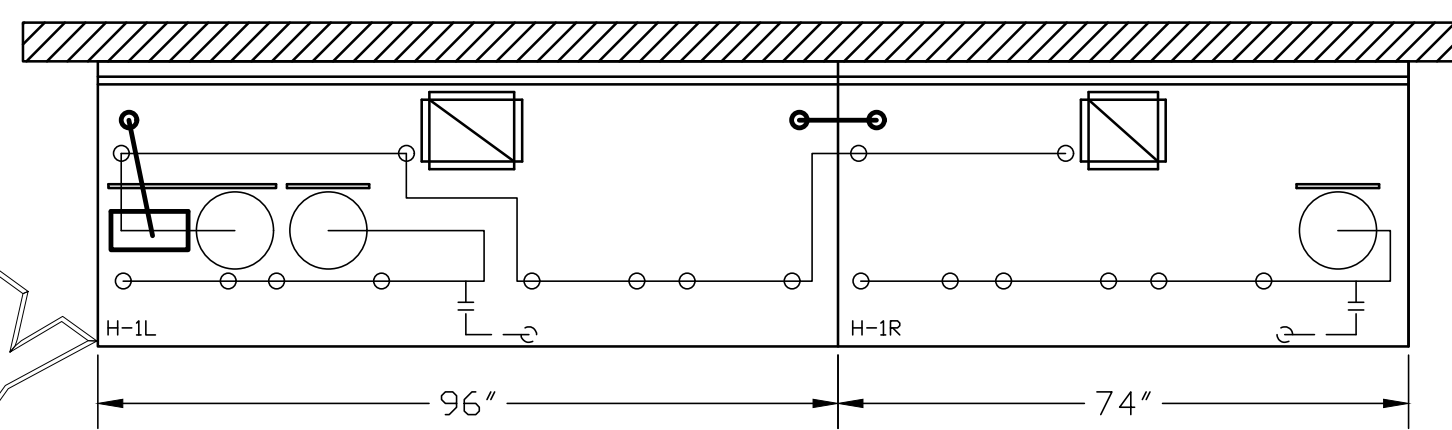
- A) (1) KP475 TANKS - 14 FLOW POINTS (REMOTE MOUNTED) (FOR HOOD H-2 & H-3)  
 B) 3/8" BLACK IRON PIPING W/ 3/8" S.S. APPLIANCE DROPS

ALL APPLIANCE NOZZLES FOR H-2 & H-3 ARE PN 11982 NOZZLES W/ SWIVELS.



AMEREX FIRE SYSTEM LAYOUT

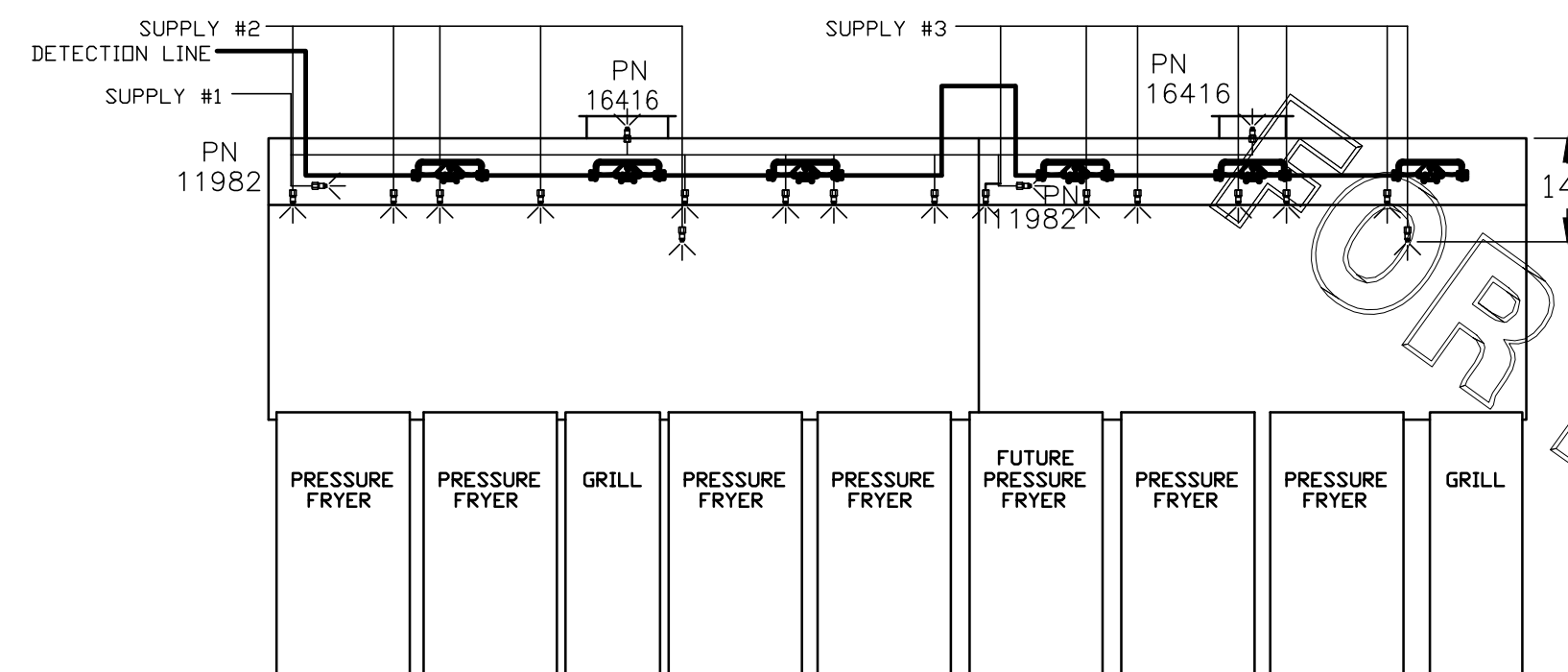
**\*\*SHOP NOTE\*\***  
 PROVIDE A QUANTITY OF TWO REMOTE PULL STATIONS FOR FIRE SYSTEM FOR HOODS H-2 & H-3. ONE PULL STATION REQUIRED FOR HOOD H-1L/R. PROVIDE A TOTAL OF THREE PULL STATIONS!!



- AMEREX FIRE SYSTEM  
 (1) MECHANICAL RELEASE MODULE  
 (2) EXTRA MICRO SWITCH ASSEMBLIES (MOUNTED IN MECHANICAL REL. MODULE)  
 (2) 4.75 GALLON TANKS  
 (1) 3.75 GALLON TANK

- A) (1) KP375 TANK - 11 FLOW POINTS EA  
 (2) KP475 TANKS - 14 FLOW POINTS (MOUNTED ON HOOD H-1L) (FOR HOODS H-1L & H-1R)  
 B) 1/2" & 3/8" BLACK IRON PIPING W/ 3/8" S.S. APPLIANCE DROPS

ALL APPLIANCE NOZZLES FOR PRESSURE FRYERS ARE PN 13729 NOZZLES W/ SWIVELS. ALL GRILL NOZZLES ARE 14178 NOZZLES W/ SWIVELS.



AMEREX FIRE SYSTEM LAYOUT

1/2" BLACK IRON SUPPLY LINE REQ'D FROM TANK TO FIRST BRANCH LINE FOR 475 TANKS ONLY!

**FUSIBLE LINK RATINGS**

| ITEM                | TEMP |
|---------------------|------|
| OPEN FRYERS         | 450° |
| 2 BURNER / FLAT TOP | 450° |
| PRESSURE FRYERS     | 450° |
| GRILL               | 450° |
| EXHAUST COLLARS     | 450° |

AMEREX FIRE SYSTEM NOTES  
 (2) KP375 & (1) KP475 TANK SYSTEM MOUNTED ON TOP OF (H-1L)  
 MAXIMUM FLOW POINTS = 36

AMEREX FIRE SYSTEM NOTES  
 KP275 TANK SYSTEM REMOTE MOUNTED  
 (2) TANKS  
 MAXIMUM FLOW POINTS = 16

| ITEM #                        | QTY | DESCRIPTION       | FLOW PTS (TOTAL) |
|-------------------------------|-----|-------------------|------------------|
| 16416                         | 4   | DUCT NOZZLES      | 4                |
| 11982                         | 4   | PLENUM NOZZLES    | 4                |
| 11982                         | 8   | APPLIANCE NOZZLES | 8                |
| 14178                         | 2   | APPLIANCE NOZZLES | 4                |
| 13729                         | 14  | APPLIANCE NOZZLES | 28               |
| <b>TOTAL FLOW POINTS - 48</b> |     |                   |                  |

| ITEM #     | QTY | DESCRIPTION  |
|------------|-----|--|
| 12508-P001 | 8   | DETECTOR BRACKET ASSEMBLY  |
| 13334      | 2   | KP375 AGENT CYLINDER   |
| 17379      | 2   | KP475 AGENT CYLINDER   |
| 18001      | 1   | MECHANICAL RELEASE MODULE W/ DOUBLE POLE MICRO SWITCH SYSTEM ENCLOSURE |
| 25851      | 1   | W/ DOUBLE POLE MICRO SWITCH  |
| 21481      | 3   | REMOTE MANUAL PULL STATION   |

AMEREX FIRE SYSTEM TESTED & LISTED BY UNDERWRITERS LABORATORIES, INC. TO UL STANDARD 300.

- FINAL INSTALLATION IS TO BE MADE IN ACCORDANCE WITH ALL APPLICABLE CODES
- ALL ELECTRICAL COMPONENTS FOR EQUIPMENT SHUT DOWN TO BE PROVIDED BY THE ELECTRICIAN. MICRO SWITCH INSTALLED IN REGULATED RELEASE BY AMEREX INSTALLER
- REMOTE PULL STATION LOCATED PER MECHANICAL DRAWINGS

THIS DRAWING MUST BE CHECKED, SIGNED AND RETURNED TO THE APPROPRIATE FACTORY. PLEASE VERIFYING THE FOLLOWING:  
 1. ALL DIMENSIONAL INFORMATION, MOUNTING POSITIONS AND CLEARANCES.  
 2. THE LOCATION AND TYPE OF COOKING EQUIPMENT.  
**NOTE TO APPROVER**  
 ANY CHANGES IN COOKING EQUIPMENT SUCH AS INCREASED ENERGY INPUTS OR EQUIPMENT CHANGES OCCURRING AFTER THE DRAWING IS APPROVED WILL BE THE RESPONSIBILITY OF THESE CHANGES. A RECALCULATION EXHAUST AIRFLOW MAY BE REQUIRED.  
 REVISE AND RESUBMIT  
 APPROVED FOR FABRICATION  
 WITH NO CHANGES  
 WITH CHANGES AS NOTED

MAIL APPROVED DRAWINGS TO APPROPRIATE FACTORY BELOW: WEBSITE: WWW.HALTONCOMPANY.COM

HALTON CO. (CANADA)  
 1021 BREVIK PLACE  
 MISSISSAUGA, ON L4W 3R7  
 1-905-624-0301

HALTON CO. (USA)  
 101 INDUSTRIAL DRIVE  
 SCOTTSVILLE, KY 42164  
 1-270-237-5600

PROJECT: CHICK-FIL-A #1634  
 CENTRAL PARK  
 LOCATION: FREDERICKSBURG, VA  
 DRAWN BY: AF DATE: 10.21.21  
 SCALE: NTS  
 Halton Dwg: U21-717-02

REV. 1 REVISION DESCRIPTION  
 2 REVISOR FOR RELEASE  
 3  
 4  
 5  
 6  
 7

**Halton**  
 CARE FOR INDOOR AIR