# DIVISION 15 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 WORK WITH OTHER TRADES. CONTRACTOR SHALL COORDINATE AND MAKE MINOR ADJUSTMENTS IN LOCATION OF EQUIPMENT AND MATERIALS AS NECESSARY FOR COORDINATION.

B. COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.

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, DUCTWORK AND AIR DEVICES SHALL BE INSPECTED AND THOROUGHLY CLEANED, CLEARED OF DEBRIS, AND 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

A. FURNISH AND INSTALL R-410A ROOFTOP SINGLE PACKAGE COMBINATION ELECTRIC COOLING AND NATURAL GAS FIRED HEATING UNITS AS SHOWN ON DRAWINGS. EQUIPMENT SHALL BE ARI CERTIFIED AND A.G.A. 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 HERMETIC SCROLL TYPE WITH INTERNAL VIBRATION ISOLATORS. COMPRESSORS SHALL BE PROVIDED WITH A MINIMUM FIVE (5) YEAR FULL WARRANTY.

D. THE UNIT HEAT EXCHANGERS SHALL BE ALUMINIZED STEEL COATING. HEATING CONTROLS SHALL CONSIST OF REDUNDANT GAS VALVES, INTERMITTENT PILOT WITH ELECTRONIC SPARK OR HOT PLATE IGNITION SYSTEM, COMBUSTION/EXHAUST FAN PROTECTED BY CENTRIFUGAL SWITCHES, HEAT LIMIT SWITCHES, TIME-DELAY RELAY, FLAME, AND PILOT SENSORS. HEAT EXCHANGERS SHALL HAVE A TEN (10) YEAR WARRANTY. BURNERS SHALL BE IN-SHOT TYPE. THE DRAFT MOTOR SHALL BE MONITORED BY THE CONTROL SYSTEM.

2.02 DUCTWORK (C15735)

A. ACCEPTABLE MANUFACTURERS OF INSULATION SHALL BE: JOHNS 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 INCLUDING DUCT CONNECTION TO AIR DEVICE COLLAR 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. DUCT SHALL BE SUPPORTED AT BASE OF DUCT DROPS. CURB DUCT RAILS ARE NOT INTENDED TO AND SHALL NOT SUPPORT THE WEIGHT OF THE DUCT.

F. ALL DUCT WRAP SHALL BE MINIMUM 2" THICK, 3/4 PCF AND 6 R-VALUE INSTALLED WITH EITHER A VAPOR BARRIER WITH MAXIMUM PERMEANCE 0.05 OR A MINIMUM 2 MIL ALUMINUM REINFORCED FOIL/KRAFT FACING.

G. ALL DUCT DROPS FROM THE ROOFTOP UNITS SHALL BE EXTERNALLY INSULATED.

H. SUPPLY AND RETURN AIR DUCTWORK SERVING ALL AREAS SHALL BE EXTERNALLY INSULATED.

I. 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.

J. RESTROOM RECTANGULAR EXHAUST AIR DUCTWORK SHALL BE LINED WITH 1" THICK, 1-1/2 PCF INSULATION. RESTROOM ROUND EXHAUST DUCT SHALL BE EXTERNALLY INSULATED PER SECTION 2.02F.

K. DUCT DROPS 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.

L. 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.

M. 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. FLEX DUCT SHALL HAVE A MINIMUM R-VALUE OF 6.

N. 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.

O. DUCT TAPE SHALL BE EQUAL TO FASSON 181-B FX, 2-1/2" WIDE.

P. SINGLE THICKNESS TURNING VANES SHALL BE INSTALLED AT ALL 90 DEGREE ELBOWS WHERE THE CENTERLINE RADIUS (R) IS LESS THAN THE WIDTH OF THE DUCT AND ANY ONE DIMENSION IS GREATER THAN 12".

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

A. SYSTEMS SHALL BE COMPLETE WITH CONNECTIONS TO CFA-500 TEMPERATURE CONTROL PANEL AS MANUFACTURED BY SUNCOAST ENVIRONMENTAL CONTROLS (S.E.C.) (PH: 877-544-6679). THE PANEL IS PROVIDED AND MOUNTED BY THE ELECTRICAL CONTRACTOR. CONTROL WIRING TERMINATIONS ARE BY THE MECHANICAL CONTRACTOR WHERE PERMITTED BY AHJ.

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 BY THE ELECTRICAL CONTRACTOR AS A PART OF A NATIONAL ACCOUNT PACKAGE AND TURNED OVER TO THE MECHANICAL CONTRACTOR FOR INSTALLATION.

E. THE REMOTE TEST/RESET ANNUNCIATORS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR. INSTALLATION BY MECHANICAL SHALL INCLUDE MOUNTING OF THE ANNUNCIATORS AND ALL WIRING FROM EACH DEVICE TO THE RTU. ELECTRICAL WILL PROVIDE A JUNCTION BOX IN THE WALL WITH 1/2" CONDUIT STUBBED UP ABOVE THE CEILING FOR EACH REMOTE TEST STATION AS SHOWN ON THE ELECTRICAL PLANS. ANNUCIATOR 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. THERMOSTATS ARE PROVIDED AND INTEGRATED INTO THE TEMPERATURE CONTROL PANEL BY SUNCOAST ENVIRONMENT CONTROLS. SUNCOAST WILL PROVIDE A NETWORK THERMOSTAT US32-CFA THERMOSTAT PRE-WIRED IN THE TEMPERATURE CONTROL PANEL. REMOTE TEMPERATURE SENSOR(S) FOR EACH THERMOSTAT IS ALSO PROVIDED. MECHANICAL CONTRACTOR SHALL INSTALL ALL WIRING BETWEEN THE THERMOSTAT, THE REMOTE SENSOR(S) AND THE ROOFTOP UNIT.

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.

2.04 PIPING

A. ALL ABOVE GRADE NATURAL GAS PIPING SHALL BE SCHEDULE 40 STEEL MEETING ASTM A53 WITH SCREWED OR WELDED FITTINGS AND GASKET TYPE UNIONS AND FLANGES. FOR SCREWED PIPING, PIPING SHALL BE JOINED WITH BLACK 150 POUND MALLEABLE IRON SCREWED FITTINGS AS ALLOWED BY LOCAL AUTHORITY. CONTRACTOR SHALL VERIFY THE NEED FOR WELDED PIPING AS REQUIRED BY THE LOCAL GAS CODE AND/OR APPLICABLE LOCAL ORDINANCES AND AMENDMENTS.

B. ALL BELOW GRADE NATURAL GAS PIPING SHALL BE MEDIUM DENSITY POLYETHYLENE (PE) MEETING ASTM D2513 AS MANUFACTURED BY GASTITE WITH JOINING SYSTEM AS MANUFACTURED BY CON-STAB. TRANSITIONS FROM ABOVE GRADE RIGID PIPING TO PE BELOW GRADE PIPING SHALL BE MADE WITH ANODE-LESS RISER ASSEMBLY AS MANUFACTURED BY CON-STAB.

C. PROVIDE AND INSTALL A CUT-OFF VALVE, UNION AND FULL SIZE DIRT LEG AT CONNECTION TO EACH GAS-FIRED PIECE OF EQUIPMENT. INSTALL PIPING AT AND AROUND EQUIPMENT SO AS TO NO WAY OBSTRUCT EQUIPMENT ACCESS PANELS AND/OR ACCESS DOORS.

D. ALL GAS PIPING ABOVE ROOF SHALL BE CLEANED FREE OF RUST AND PAINTED WITH COAT OF ZINC RUST PRIMER AND ONE COAT OF ALUMINUM BASE PAINT. METER AND GAS RISER SHALL BE PRIMED AND PAINTED TO MATCH BUILDING.

E. NATURAL GAS PIPING SHALL BE LEAK TESTED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS AND MANUFACTURERS RECOMMENDATIONS.

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. 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.

C. 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.

D. CONTRACTOR SHALL COMPLETE A/C EQUIPMENT STARTUP DOCUMENTATION PROVIDED BY OWNER AND/OR MANUFACTURER. THIS SHALL INCLUDE RE-TORQUE OF ALL FIELD AND FACTORY HIGH VOLTAGE CONNECTIONS.

3.02 LEED PROJECTS

A. CONTRACTOR SHALL COMPLETE RECEIPT INSPECTION CHECKLISTS PROVIDED IN THE COMMISSIONING PLAN WITHIN 5 DAYS OF RECEIVING EQUIPMENT ON SITE.

B. CONTRACTOR SHALL COMPLETE PRE-FUNCTIONAL CHECKLISTS PROVIDED IN THE COMMISSIONING PLAN. CHECKLISTS SHALL BE RETURNED AT LEAST 5 DAYS PRIOR TO SCHEDULING FUNCTIONAL PERFORMANCE TESTING.

C. CONTRACTOR SHALL PROVIDE A TECHNICIAN TO ASSIST THE THIRD PARTY COMMISSIONING AUTHORITY WITH FUNCTIONAL TESTING. FUNCTIONAL TESTING SHALL OCCUR AFTER ALL CONTROLS HAVE BEEN INSTALLED AND VERIFIED AND AFTER TEST AND BALANCE IS COMPLETE. THE FUNCTIONAL PERFORMANCE TEST PROCEDURES CAN BE FOUND IN THE COMMISSIONING PLAN.

D. IF THE TOTAL TIME REQUIRED TO CORRECT PROBLEMS DURING TESTING IS GREATER THAT FORTY-FIVE (45) MINUTES (UNLESS EXTENUATING CIRCUMSTANCES EXIST), THE TEST SHALL BE CONSIDERED FAILED AND MUST BE REPEATED IN ITS ENTIRETY.

E. RE-TESTING: DURING THE COURSE OF THE RETEST, IF AT ANY POINT A MAJOR DEFICIENCY IS DISCOVERED, THE TEST WILL BE STOPPED. REPEAT TESTS UNTIL ACCEPTABLE RESULTS ARE ACHIEVED. IF MORE THAN TWO FUNCTIONAL PERFORMANCE TESTS (ONE INITIAL TEST AND ONE RETEST) FOR ANY TYPE OF EQUIPMENT DUE TO ISSUES THAT THE CONTRACTOR HAD DIRECT OR INDIRECT CONTROL OVER ARE REQUIRED, THE COSTS FOR THE CXA TO WITNESS RETESTING OF SIMILAR TYPES OF EQUIPMENT UNTIL SATISFACTORY RESULTS ARE OBTAINED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

3.03 TEST & BALANCE

A. OWNER SHALL TEST AND BALANCE MECHANICAL SYSTEM IN ACCORDANCE WITH NEBB, NBC 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.

B. ALL EQUIPMENT TO BE BALANCED MUST HAVE GONE THRU SUCCESSFUL START-UP PROCEDURE BY THE MECHANICAL CONTRACTOR (MC) PRIOR TO TAB VISIT.

C. THE FLOOR OF THE RESTAURANT SHALL BE CLEARED OF DEBRIS, STAGED CONSTRUCTION MATERIALS, EQUIPMENT, ETC. WHICH MAY, IN THE OPINION OF THE TAB TECHNICIAN, OBSTRUCT ACCESS TO AIR DISTRIBUTION COMPONENTS IN AND ABOVE THE CEILING.

D. EQUIPMENT ACCESS PANELS, DUCT AIR DEVICES SUCH AS BALANCING DAMPERS AND ACTUATORS SHALL BE ACCESSIBLE AND CLEAR OF PIPING, CONDUIT, FRAMING, SUPPORTS ETC...

E. PROVIDE AN 8 FT PORTABLE A-FRAME STYLE LADDER DEDICATED FOR THE TAB TECHNICIAN'S USE DURING THE ENTIRE TAB EFFORT DURATION.

## KITCHEN HOOD SYSTEMS NOTES

1. CHICK-FIL-A MAINTAINS A NATIONAL ACCOUNT WITH HALTON CO. FOR THE 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.
2. THE FIRE SUPPRESSION SYSTEM SHALL CONSIST OF A COMPLETE WET CHEMICAL SYSTEM FURNISHED BY HALTON. THE HOOD SHALL BE FURNISHED PRE-PIPED BY HALTON.
3. THE FIRE SUPPRESSION SYSTEM EXTERNAL TO THE HOODS SHALL BE INSTALLED IN ACCORDANCE WITH HOOD MANUFACTURER'S SHOP DRAWINGS BY AN AUTHORIZED INSTALLER SELECTED AND HIRED BY HALTON. COST FOR INSTALLATION INCLUDED IN PRICE OF HOODS TO CFA.
4. HOOD EXHAUST DUCTWORK SHALL BE 16 GA. BLACK STEEL WITH CONTINUOUS LIQUID TIGHT WELD OF JOINTS & SEAMS.
5. TURNS IN GREASE EXHAUST DUCTWORK SHALL BE LONG RADIUS TYPE, WITH A CENTERLINE RADIUS R=3W/2, UNLESS OTHERWISE NOTED. NO MITERED FITTINGS ALLOWED.
6. ALL STAINLESS STEEL CLOSURE PANELS SHALL BE SUPPLIED BY HOOD MANUFACTURER AND INSTALLED BY THE MECHANICAL CONTRACTOR ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
7. SLOPE ALL GREASE EXHAUST DUCT BACK TO HOOD AT 1/4" PER FOOT OF RUN.
8. WRAP NEW GREASE DUCT WITH UNIFRAX FYREWRAP. INSULATION ON ACCESS DOORS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION RECOMMENDATIONS. UNIFRAX FYREWRAP PRODUCT USED SHALL MEET LOCAL CODE REQUIREMENTS.
9. SUPPORT ALL HOODS WITH THREADED ROD AT EACH FACTORY SUPPORT POINT. EACH SUPPORT POINT MUST SUPPORT THE HOOD WEIGHT EQUALLY. ATTACH TO STRUCTURE AS DETAILED ON STRUCTURAL DRAWINGS. ATTACH HOOD TO WALL AT 16" INTERVALS ALONG FULL LENGTH OF HOOD ON TOP AND BOTTOM. ATTACHMENT TO WALL REQUIRES FIELD DRILLING OF SUPPORT ANGLE AT BACK OF HOODS. EACH WALL ATTACHMENT POINT MUST OCCUR AT A WALL STUD. ATTACHMENT HARDWARE TO BE #12-24 HEX HEAD SHEET METAL SCREW EQUAL TO TEXTRON SDS EDT265, LENGTH AS REQUIRED TO FULLY PENETRATE THE STUD.

## GENERAL NOTES

1. DUCT SIZES SERVING DIFFUSERS AND GRILLES ARE SAME SIZE AS DIFFUSER OR GRILLE NECK UNLESS NOTED OTHERWISE.
2. FLEXIBLE DUCT AND INSULATION NOT SHOWN FOR CLARITY.
3. FOR ALL ROOF EQUIPMENT, PROVIDE A PLASTIC ENGRAVED LABEL WITH 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND. WITH A SELF ADHESIVE BACKING.
4. UNLESS NOTED OTHERWISE, MC TO ADJUST ALL DIFFUSER AIR PATTERN DEFLECTORS TO THROW HORIZONTALLY ALONG THE CEILING.
5. ALL EXHAUST DUCTWORK AND UNFINISHED METAL ON ROOF EXCEPT STAINLESS SHALL BE PREPARED WITH TWO COATS OF SHERWIN WILLAIMS PRO INDUSTRIAL DTM ACRYLIC COATING, SEMI-GLOSS, WHITE. DEGREASE AND PRIME BARE METAL SURFACE WITH ONE COAT OF SHERWIN WILLAIMS PRO INDUSTRIAL PRO-CRYLACRYLIC UNIVERSAL PRIMER, WHITE, PRIOR TO PAINTING.
6. MAINTAIN 18" CLEARANCE FROM GREASE EXHAUST DUCTWORK ABOVE ROOF TO ANY COMBUSTIBLE CONSTRUCTION INCLUDING PARAPET WALLS.

## CANOPY GENERAL NOTES

1. COORDINATE WORK WITH CONDUIT, STRUCTURE, AND PIPING. FIELD VERIFY CONDITIONS PRIOR TO START OF WORK.
2. COORDINATE LOCATION AND RESPONSIBILITIES FOR UNDERGROUND PIPING AND ASSOCIATED TRENCHING WITH GENERAL CONTRACTOR PRIOR TO START OF WORK.
3. EXPOSED GAS PIPING SHALL BE COVERED WITH A RUST INHIBITING PAINT SUCH AS RUST-OLEUM 5200. PAINT COLOR SHALL MATCH STRUCTURE. ROOF MOUNTED GAS PIPING COLOR SHALL BE YELLOW.
4. CONTROL WIRING FOR HEATERS BY EC. COORDINATE REQUIRED WIRE GAUGE WITH EC. SEE CONTROLS PLAN AND ELECTRICAL DRAWINGS, (TYP.).

## LEGEND

| | | | |
|---|---|---|---|
| A-12-400 | TYPE - NECK SIZE - CFM | EF#1 | EXHAUST FAN #1 (TYP.) |
| | SPIN-IN FITTING WITH MANUAL BALANCING DAMPER, WITHOUT SCOOP | AC#1 | AIR CONDITIONING UNIT #1 (TYP.) |
| | SPIN-IN HARD FLEXIBLE DIFFUSER | | RETURN/EXHAUST (TYP.) |
| S | REMOTE TEMPERATURE SENSOR | | SUPPLY DIFFUSER, SQ FACE (TYP.) |
| H | HUMIDITY SENSOR | 1 | PLAN NOTE REFERENCE |
| SD | SMOKE DETECTOR | | MANUAL VOLUME DAMPER |
| 12x18 | DUCT SIZE (reverse for elevation views)<br>1ST NUMBER - HORIZONTAL DIMENSION<br>2ND NUMBER - VERTICAL DIMENSION | | DIRECTION OF THROW ON DIFFUSER |
| | | | CLOSED AIR PATTERN DEFLECTOR |
| SW | AIR DOOR SWITCH | GIH | GAS INFRARED HEATER (TYP.) |
| EIH | ELECTRIC INFRARED HEATER | B/G | BELOW GRADE |
| | | T | THERMOSTAT |
| | | | |

## ABBREVIATIONS

| | |
|---|---|
| EC | ELECTRICAL CONTRACTOR |
| GC | GENERAL CONTRACTOR |
| MC | MECHANICAL CONTRACTOR |
| PC | PLUMBING CONTRACTOR |
| O.C. | ON CENTER |
| IRH | INFRARED HEATER |
| CF | CIRCULATING FAN |
| TF | TRANSFER FAN |
| EF | EXHAUST FAN |


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SEAL:

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01060
REGISTERED ARCHITECT

STATE OF SOUTH CAROLINA
INTERPLAN, LLC
No. C02393
CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
## BUSH RIVER ROAD
NW CORNER OF COLONIAL
LIFE BLVD W & BUSH RIVER RD
COLUMBIA, SC 29210

**FSR#05714**

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
PRINTED FOR
**BID**

**REVISION SCHEDULE**

| NO. | DATE | DESCRIPTION |
|---|---|---|

CONSULTANT PROJECT # 2024.0344
DATE 12/20/24
DRAWN BY JR



SHEET
**GENERAL NOTES, LEGENDS, SYMBOLS, AND ABBREVIATIONS**
SHEET NUMBER
**M-001**




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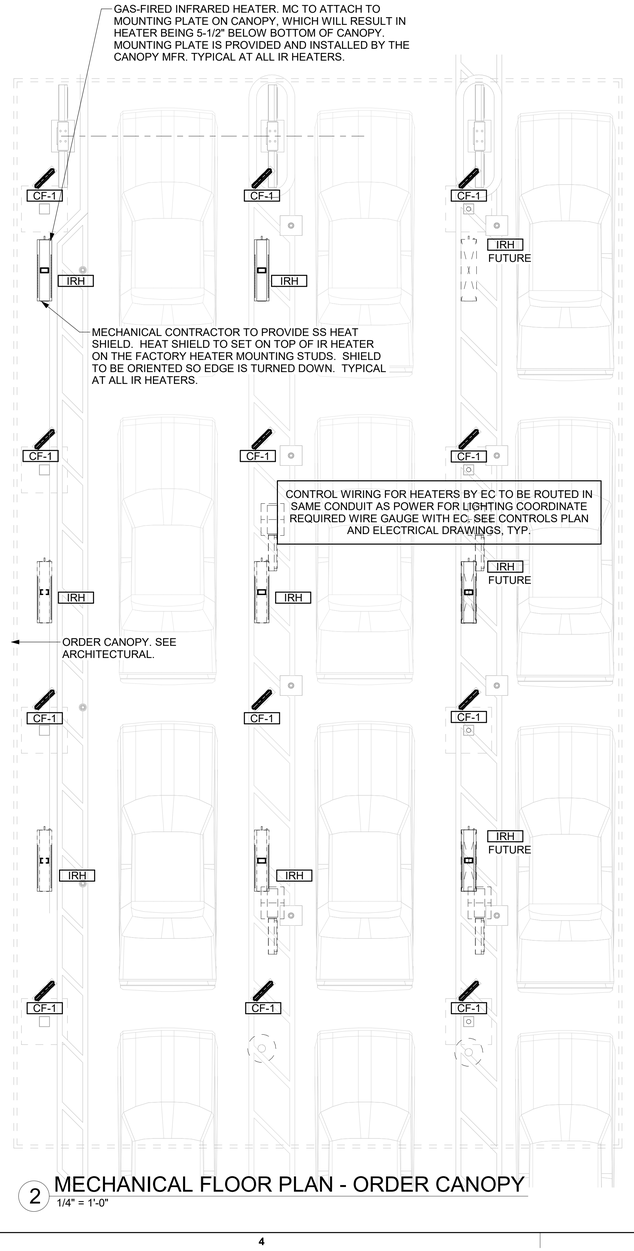
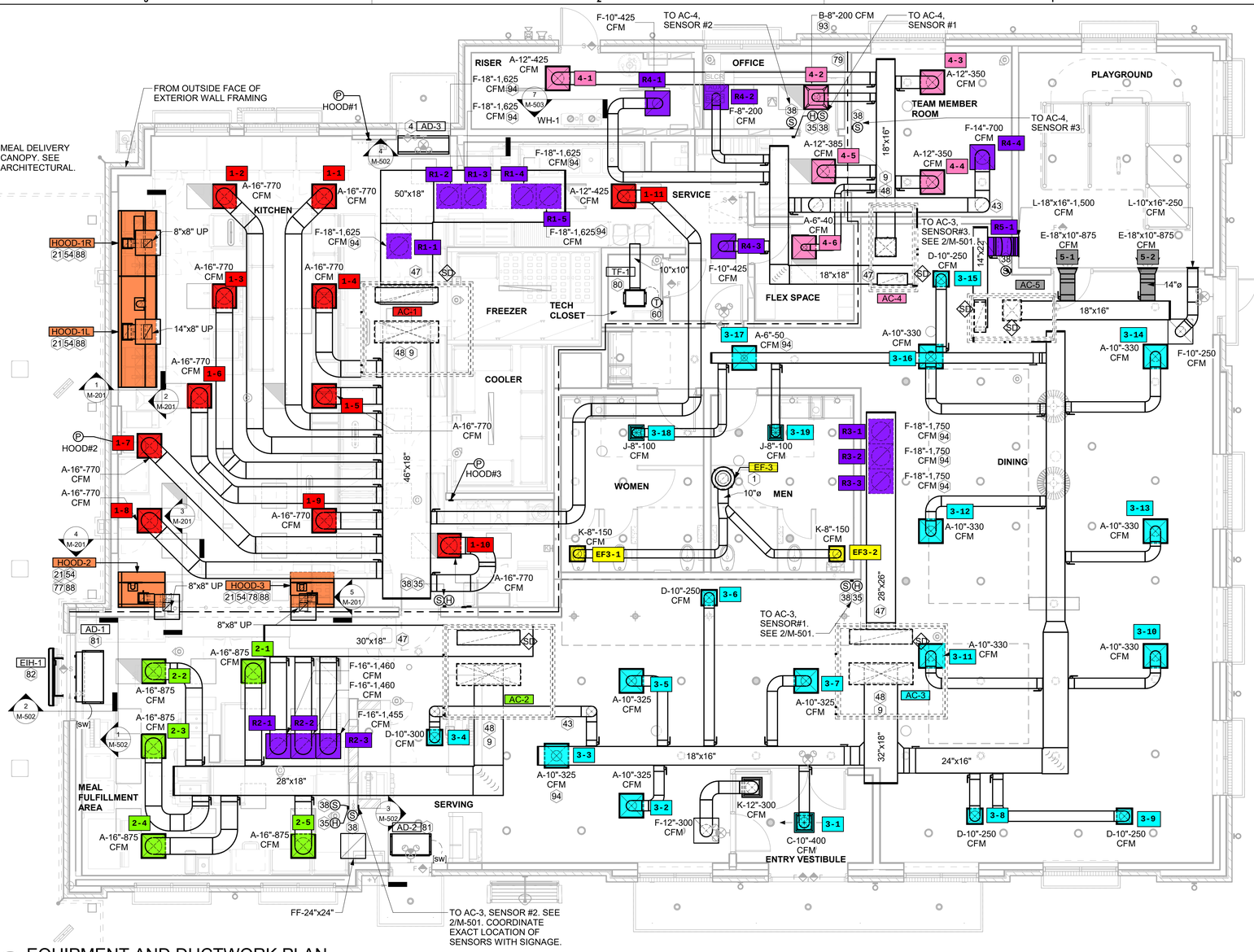



2 MECHANICAL FLOOR PLAN - ORDER CANOPY
1/4" = 1'-0"




1 EQUIPMENT AND DUCTWORK PLAN
1/4" = 1'-0"

## KEY NOTES

1 10" UP THRU ROOF.

4 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.

9 BRANCH TAKE-OFFS ARE NOT TO BE LOCATED CLOSER THAN 3'-0" FROM ANY OFFSET OR ELBOW INCLUDING THE SUPPLY AIR DROP FROM CURB.

21 HALTON KBD DAMPER AT HOOD COLLAR BY MECHANICAL CONTRACTOR. SEE HOOD ELEVATIONS ON M-201 FOR LOCATION.

35 MOUNT HUMIDITY SENSOR ON WALL ABOVE SPACE TEMP SENSOR AND ROUTE WIRING TO UNIT ON ROOF.

38 MOUNT REMOTE SENSOR ON WALL AT 5-0" AFF U.N.O. AND ROUTE WIRING BACK TO SUNCOAST TEMP CONTROL PANEL. FOR SENSOR SERVING AC#1, COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT.

43 ROUTE DUCT WITHIN STRUCTURE.

47 TRANSITION IN VERTICAL DROP FROM FULL SIZE OF CURB OPENING TO SIZE SHOWN. SEE DETAIL 6/M-501 FOR REQUIRED TRANSITION GEOMETRY. TRANSITION WITHIN CURB WHERE REQUIRED TO AVOID STRUCTURE. WHERE THE DUCT IS SHOWN OFFSET HORIZONTALLY, PROVIDE ELBOW WITHOUT TURNING VANES. FOR DROPS WITH NO HORIZONTAL OFFSET, EXTEND DROP BELOW STRUCTURE TO ACCOMMODATE START COLLARS. TERMINATE DROP A MINIMUM 0'-10" ABOVE CEILING (0'-4" ABOVE CEILING IF REQUIRED TO ACCOMMODATE TAKE-OFF AND DROP IS NOT LOCATED DIRECTLY ABOVE A LIGHT).

48 TRANSITION IN VERTICAL DROP FROM FULL SIZE OF CURB OPENING TO SIZE SHOWN. TRANSITION WITHIN CURB WHERE REQUIRED TO AVOID STRUCTURE. WHERE THE DUCT IS SHOWN OFFSET HORIZONTALLY, PROVIDE ELBOW WITH TURNING VANES. FOR DROPS WITH NO HORIZONTAL OFFSET, EXTEND DROP BELOW STRUCTURE TO ACCOMMODATE START COLLARS. TERMINATE DROP A MINIMUM 0'-10" ABOVE CEILING (0'-4" ABOVE CEILING IF REQUIRED TO ACCOMMODATE TAKE-OFF AND DROP IS NOT LOCATED DIRECTLY ABOVE A LIGHT).

54 SEE ELEVATIONS ON M-201 FOR CJ FAN DUCTING REQUIREMENT.

60 MOUNT THERMOSTAT ON WALL AT 4-0" AFF..

77 INSTALL LEFT SIDE OF HOOD FLUSH WITH FINISHED EDGE OF PASS-THRU OPENING.

78 INSTALL RIGHT SIDE OF HOOD WITH FINISHED EDGE OF PASS-THRU OPENING.

79 SEAL PENETRATIONS IN SMOKE DRAFT CURTAIN AIR TIGHT. SEE ARCH PLANS FOR CONSTRUCTION.

80 CEILING MOUNTED RECIRCULATING FAN. DUCT AND DISCHARGE ABOVE CEILING.

81 MOUNT AIR DOOR IN CEILING. CENTERED ON DRIVE-THRU/MFA DOOR OPENING. REFER TO WIRING DIAGRAM ON SHEET M-702 FOR MORE INFORMATION.

82 ELECTRIC HEATER. MC TO MOUNT ON WALL PER MANUFACTURER'S RECOMMENDATIONS.

88 PULL STATION FOR KITCHEN EXHAUST HOOD MOUNTED 42" TO 48" A.F.F. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT ELEVATIONS. JUNCTION BOX AND CONDUIT PROVIDED BY ELECTRICAL CONTRACTOR. PROVIDE PLASTIC ENGRAVED LABEL - RED WITH 1" HIGH WHITE LETTERING. LABELS SHALL BE AS FOLLOWS: HOOD #1 - "MAIN COOKLINE", HOOD #2 - "PASS THRU - RIGHT", HOOD #3 - "PASS THRU - LEFT".

93 MAXIMUM HEATING AND COOLING AIRFLOWS INDICATED. SET MINIMUM AIRFLOW TO 25 CFM.

94 TAKE OFF WITH DAMPER AT THE BOTTOM OF DUCTWORK, TYP.

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

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INTERPLAN LLC

ARCHITECTURE
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ORLANDO, FL
01060
REGISTERED ARCHITECT

SOUTH CAROLINA
INTERPLAN, LLC
No. C02393
CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
## BUSH RIVER ROAD
NW CORNER OF COLONIAL
LIFE BLVD W & BUSH RIVER RD
COLUMBIA, SC 29210

**FSR#05714**

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
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**REVISION SCHEDULE**

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CONSULTANT PROJECT # 2024.0344
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SHEET
**EQUIPMENT AND DUCTWORK PLAN**

SHEET NUMBER
**M-101L**

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30-SE-05714-M-101L-EQUIPMENT AND DUCTWORK PLAN

## KEY NOTES

10 TURN 3" GAS UP WITHIN WALL, THRU PARAPET AND ONTO ROOF.

11 ROUTE POLYETHYLENE GAS BELOW GRADE FROM THE METER. FOR TRANSITION FROM POLYETHYLENE PIPING BELOW GRADE TO STEEL AT THE METER, INSTALL ANODELESS RISER WITH INTEGRAL CONSTAB PE-TO-IPS TRANSITION FITTING BY CONTINENTAL INDUSTRIES OR EQUAL BY ELSTER.

16 FABRICATE DISCHARGE AIR NOZZLE. VERIFY EXHAUST TERMINATION IS A MINIMUM 10'-0" FROM PARAPETS AND OUTSIDE AIR INTAKES. REFER TO MH-1.3 AND MH-1.4 FOR DETAILS.

19 1-1/2" GAS BELOW GRADE TO ORDER CANOPY, SEE DETAIL 2 THIS SHEET.

20 GREASE EXHAUST DUCT LOCATED ON ROOF SHALL SLOPE ¼"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 OR FLUSH WITH THE CURB CAP, BUT NOT BELOW THE CAP. THE DUCT AT THE FAN MUST BE CENTERED ON THE FAN INLET.

28 PROVIDE FULL PORT BALL VALVE EQUAL TO APOLLO 50GB SERIES WITH WINGS HANDLE OPTION ABOVE GRADE AT THE METER. PROVIDE BRASS VALVE TAG WITH JACK CHAIN AT VALVE MARKED "SERVICE SHUTOFF FOR CANOPY HEATERS."

30 MECHANICAL CONTRACTOR TO SEE ARCHITECTURAL ROOF PLAN FOR NOTES REGARDING LEVELING FRAMES FOR RTUS. COORDINATE WITH GENERAL CONTRACTOR EXACT LOCATIONS AND SIZE NEEDED.

44 1-1/2" GAS DOWN THRU ROOF TO WATER HEATER. SEE DETAIL 3/P-502 FOR MORE INFORMATION ON CONSTRUCTION AND PENETRATION. WHEN CONTRACTOR OPTS TO PROVIDE ALTERNATIVE WATER-HEATER, INCREASE PIPE SIZE AS NEEDED PER CODE.

55 SEE ARCHITECTURAL DETAILS FOR ROOFTOP PIPE PENETRATIONS.

56 GC SHALL PROVIDE EQUIPMENT STANDS AS MANUFACTURERED BY AVCOA OR EQUAL. STANDS SHALL BE INSTALLED PRIOR TO ROOF INSULATION SO THAT THE INSULATION IS CONTINUOUS UP TO THE PIPE POSTS. POSTS SHALL BE FLASHED IN ACCORDANCE WITH ROOFING MANUFACTURER'S INSTALLATION INSTRUCTIONS. COORDINATE BLOCKING BELOW THE ROOF DECK AS REQUIRED.

83 DO NOT DISCHARGE OF CONDENSING UNITS INTO CONDENSER SECTION OF ROOFTOP UNITS, TYP.

84 ROOF CURB FOR DUCT PENETRATION. REFER TO MH-1.3 AND MH-1.4 FOR DETAILS.

85 TURN DOWN THRU ROOF. SEE M-101L/M-101T FOR CONTINUATION.

87 DUCT PENETRATIONS ON ROOF MUST BE AT LEAST 18" FROM ADJACENT PARAPETS.

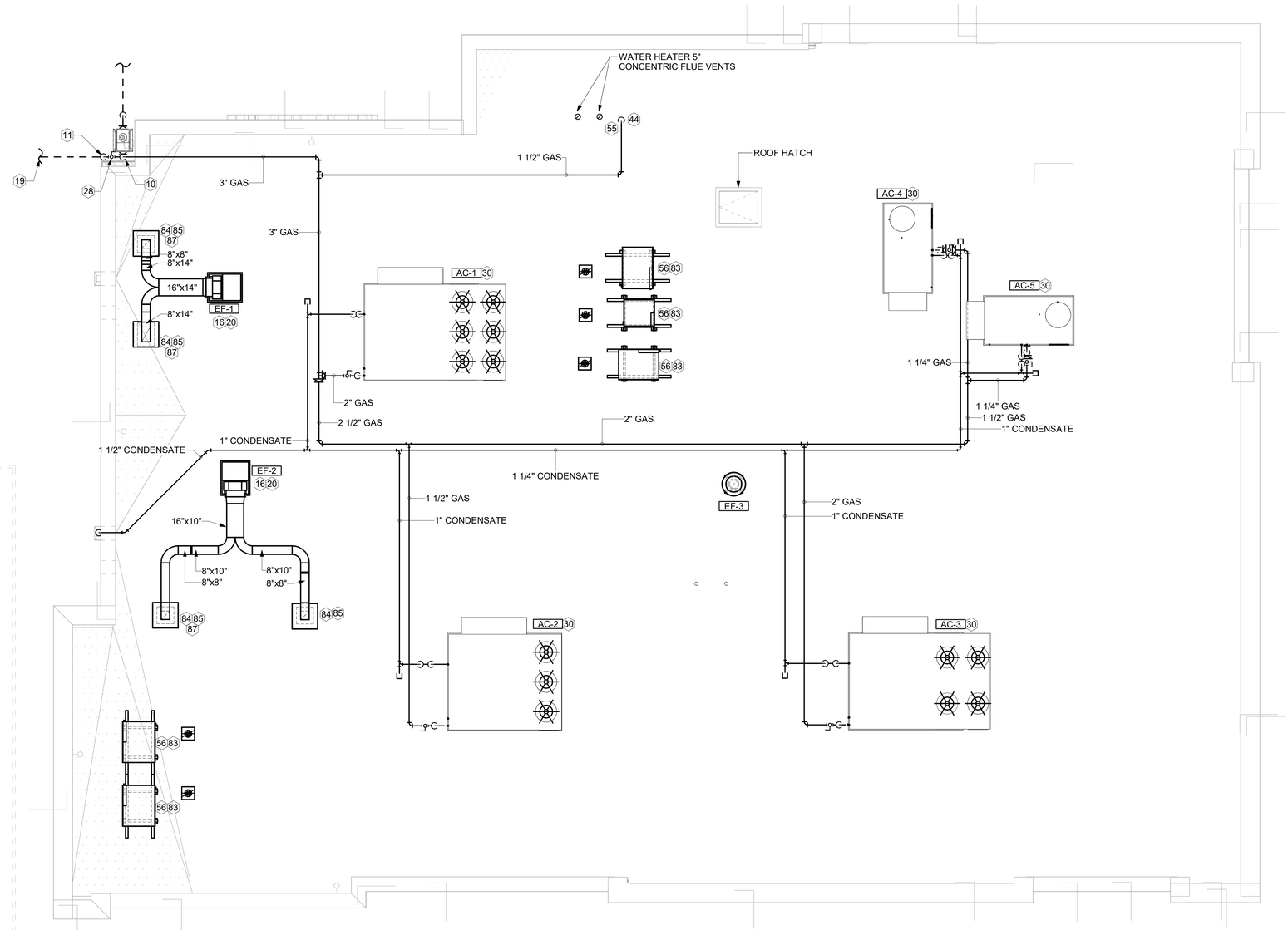
95 GAS PIPING TO BE ROUTED ABOVE CANOPY, ON TOP OF STRUCTURAL MEMBERS, EXCEPT WHERE ROUTED DOWN THROUGH PENETRATIONS AS INDICATED.

96 GAS PIPING DOWN THROUGH DECK. WEATHERPROOF DECK PENETRATION PER DETAIL 6/M-503, TYPICAL.

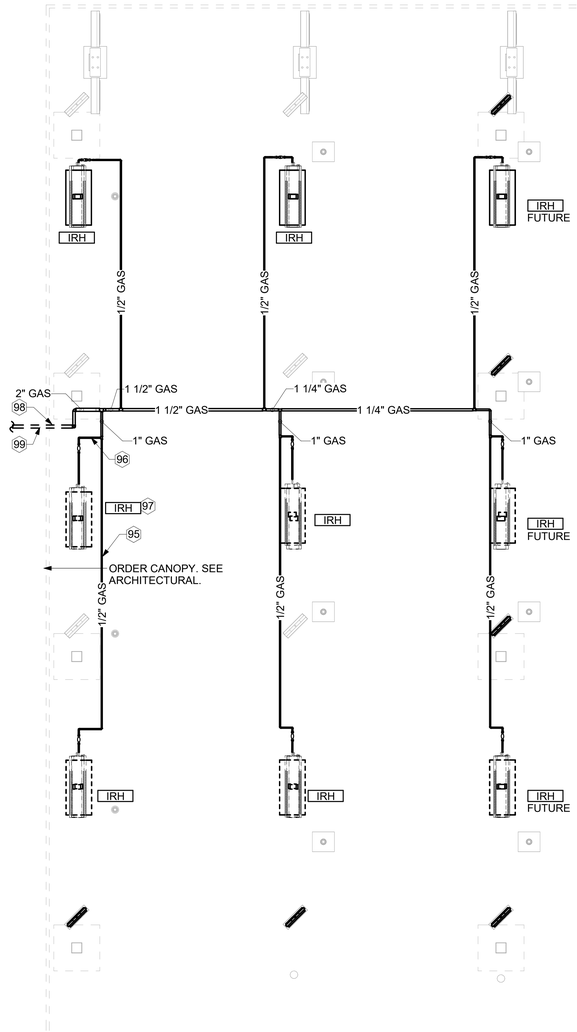
97 SEE DETAIL 1/M-503 FOR PIPING AT IRH, TYPICAL.

98 GAS TRANSITION FITTING TO GAS PIPE STUB-OUT. GAS PIPING INSIDE COLUMN AND STUB-OUTS BY CANOPY MFR. JOIN UNDERGROUND POLYETHYLENE GAS PIPING TO TRANSITION FITTING WITH ELSTER PERMASERT COUPLING. CANOPY MFR'S EXPOSED STEEL PIPING BELOW GRADE SHALL BE PROTECTED WITH TWO COATS ASPHALT TUM BASE PAINT AND POLY SLEEVE.

99 1-1/2" GAS B/G TO METER SEE 1/M-102L OR 1/M-102T.




1 EQUIPMENT ROOF PLAN - LENNOX
1/4" = 1'-0"




2 ORDER CANOPY GAS PIPING PLAN
1/4" = 1'-0"

### 3. GAS LOAD SCHEDULE

| EQUIPMENT | GAS LOAD |
|---|---|
| AC-1 | 480,000 BTUS |
| AC-2 | 360,000 BTUS |
| AC-3 | 480,000 BTUS |
| AC-4 | 150,000 BTUS |
| AC-5 | 150,000 BTUS |
| IRH (6 @ 50,000 BTU EA.) | 300,000 BTUS |
| IRH (FUTURE 3 @ 50,000 BTU EA.) | 150,000 BTUS |
| WATER HEATER | 398,000 BTUS |
| TOTAL BASIS OF DESIGN LOAD | 2,318,000 BTUS |
| TOTAL FUTURE CONNECTED LOAD | 2,468,000 BTUS |
| REMARKS: | 1. EQUIVALENT TO 2,468.0 CFH<br>2. 7" W.C. DELIVERY PRESSURE<br>3. DEVELOPED LENGTH: 175 FT, (METER TO IRH#9)<br>4. GAS PIPING SIZED FOR FUTURE LOAD |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SOUTH CAROLINA — INTERPLAN, LLC — No. C02393 — CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
## BUSH RIVER ROAD
NW CORNER OF COLONIAL
LIFE BLVD W & BUSH RIVER RD
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SHEET
**EQUIPMENT ROOF PLAN - LENNOX**

SHEET NUMBER
**M-102L**




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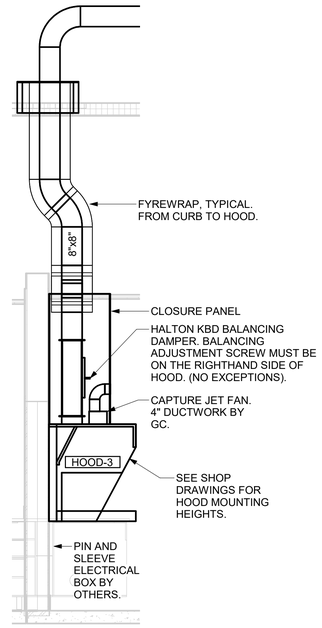
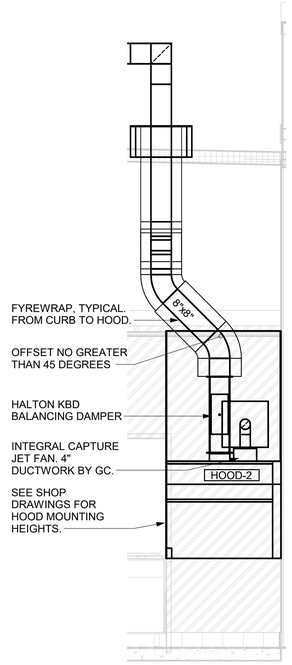
30-SE-05714-M-102L-EQUIPMENT ROOF PLAN - LENNOX

| GREASE EXHAUST DUCT CLEARANCE NOTE: |
|---|
| CLEARANCES ABOVE CEILING ARE TIGHT. MECHANICAL CONTRACTOR TO FIELD VERIFY EXACT ROUTING AND CLEARANCES PRIOR TO FABRICATING GREASE EXHAUST DUCT. |

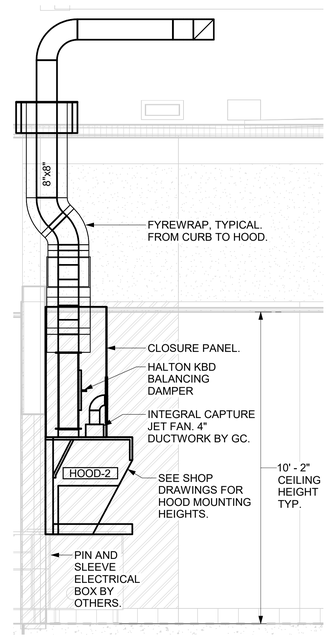
| CLEANOUT DOOR NOTE: |
|---|
| DUCT WRAP SHALL BE APPLIED TO THE CLEANOUT DOOR PER THE WRAP MFR'S INSTALLATION INSTRUCTIONS, NO EXCEPTIONS. ALSO, THE CLEANOUT DOOR MUST BE REMOVABLE WITHOUT TOOLS AND MUST BE CLEARLY AND PERMANENTLY LABELED. |



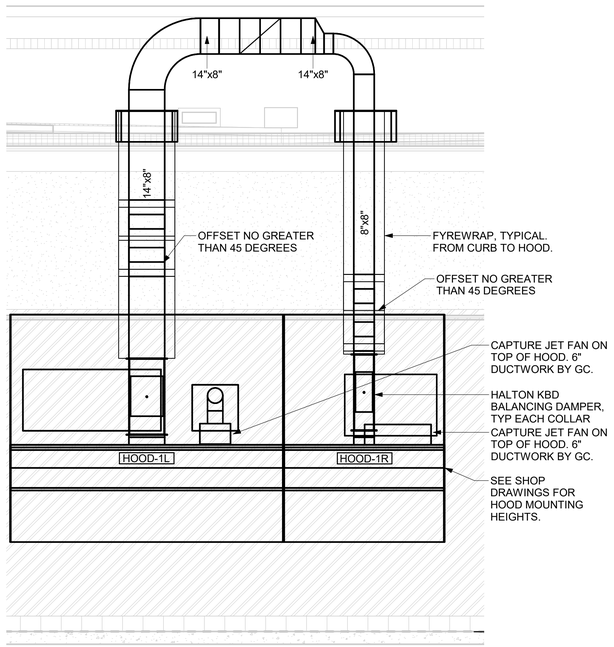

5 HOOD ELEVATION - HOOD#3
NOT TO SCALE



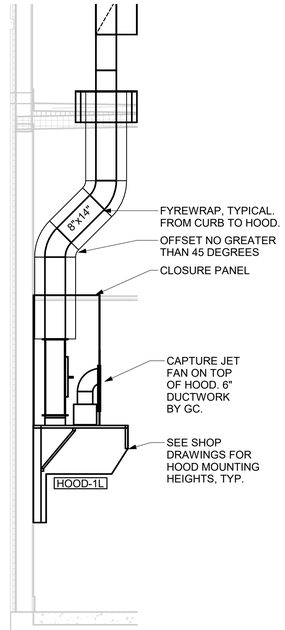

4 HOOD ELEVATION - HOOD#2 - FRONT
NOT TO SCALE




3 HOOD ELEVATION - HOOD#2 - SIDE
NOT TO SCALE




2 HOOD ELEVATION - HOOD#1 - FRONT
NOT TO SCALE




1 HOOD ELEVATION - HOOD#1 - SIDE
NOT TO SCALE

1/27/2025 2:30:15 PM Autodesk Docs://SC_05714_Bush River Road_2024.8_REI/05714_Bush River Road_MEC.rvt
30-SE-05714-M-201-EXHAUST HOOD ELEVATIONS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## BUSH RIVER ROAD
NW CORNER OF COLONIAL
LIFE BLVD W & BUSH RIVER RD
COLUMBIA, SC 29210

## FSR#05714

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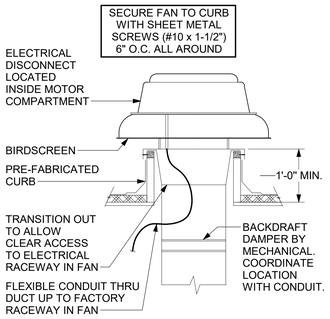
SHEET
**EXHAUST HOOD ELEVATIONS**

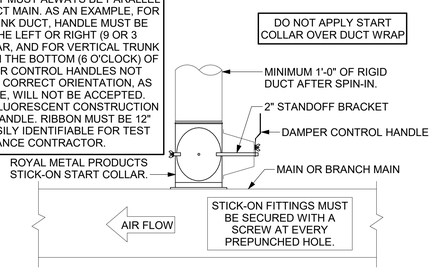
SHEET NUMBER
**M-201**



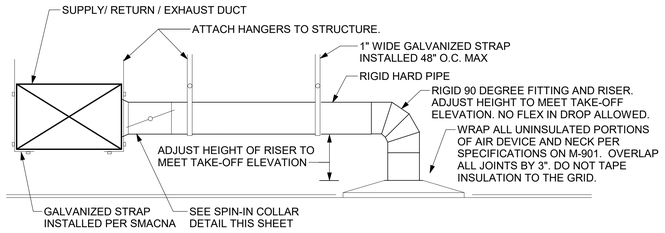

## 3 RESTROOM EXHAUST FAN
NOT TO SCALE

CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARROW COMPANY FOR THE ROYAL METAL PRODUCTS START COLLARS FOR BOTH WITH AND WITHOUT A MANUAL BALANCING DAMPER. THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE ROYAL METAL PRODUCTS START COLLARS DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. ROYAL METAL PRODUCTS START COLLARS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.

DAMPER CONTROL HANDLE MUST BE EXPOSED, AND DAMPER SHAFT MUST ALWAYS BE PARALLEL TO AIRFLOW IN DUCT MAIN. AS AN EXAMPLE, FOR HORIZONTAL TRUNK DUCT, HANDLE MUST BE LOCATED ON THE LEFT OR RIGHT (9 OR 3 O'CLOCK) OF COLLAR, AND FOR VERTICAL TRUNK DUCT, LOCATED ON THE BOTTOM (6 O'CLOCK) OF COLLAR. DAMPER CONTROL HANDLES NOT INSTALLED IN THE CORRECT ORIENTATION, AS SPECIFIED ABOVE, WILL NOT BE ACCEPTED. ATTACH YELLOW FLUORESCENT CONSTRUCTION RIBBON TO THE HANDLE. RIBBON MUST BE 12" LONG AND BE EASILY IDENTIFIABLE FOR TEST AND BALANCE CONTRACTOR.



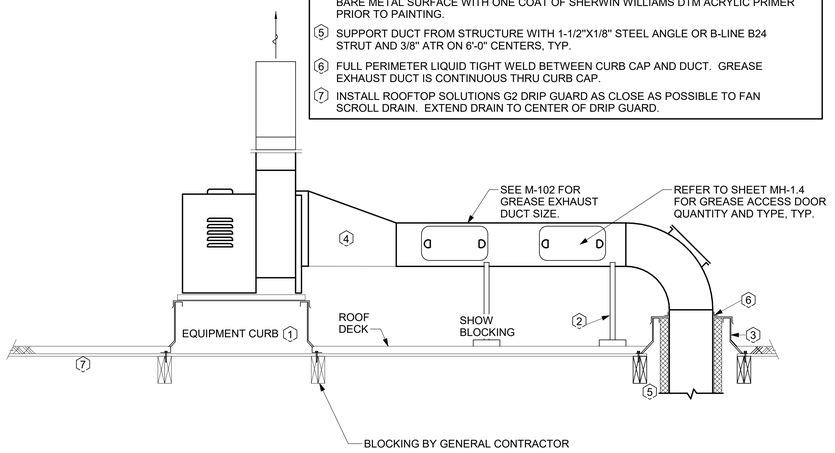

## 2 START COLLAR
NOT TO SCALE



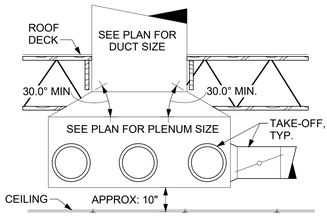

## 1 SAG/RAG/GRILLE TAKE-OFF
NOT TO SCALE

KEYED NOTES:

1. 22" EQUIPMENT CURB FURNISHED BY HALTON.
2. DUCT SUPPORT SHALL BE PROVIDED EVERY 8', AND WITHIN 12" OF ANY FITTING OR WELD SEAM. SUPPORTS SHALL BE SECURELY ATTACHED TO THE STRUCTURE AND DESIGNED TO CARRY GRAVITY, WIND, AND SEISMIC LOADS PER CODE.
3. 12" HIGH INSULATED CURB FURNISHED BY HALTON. MECHANICAL CONTRACTOR TO PROVIDE MINIMUM 18 GA STAINLESS STEEL CURB CAP AND FLASHING.
4. 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 ACRYLIC PRIMER PRIOR TO PAINTING.
5. SUPPORT DUCT FROM STRUCTURE WITH 1-1/2"X1/8" STEEL ANGLE OR B-LINE B24 STRUT AND 3/8" ATR ON 6'-0" CENTERS, TYP.
6. FULL PERIMETER LIQUID TIGHT WELD BETWEEN CURB CAP AND DUCT. GREASE EXHAUST DUCT IS CONTINUOUS THRU CURB CAP.
7. INSTALL ROOFTOP SOLUTIONS G2 DRIP GUARD AS CLOSE AS POSSIBLE TO FAN SCROLL DRAIN. EXTEND DRAIN TO CENTER OF DRIP GUARD.



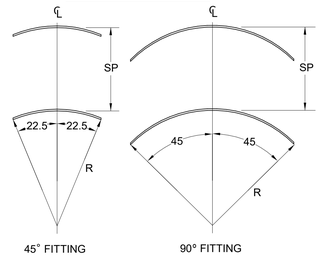

## 6 KITCHEN HOOD EXHAUST FAN - UTILITY SET - WOOD FRAMING
NOT TO SCALE




## 5 RETURN DROP GEOMETRY
NOT TO SCALE

| TURNING VANE SCHEDULE | | |
|---|---|---|
| R | SP | GA |
| 2" | 1.5" | 24 |

1. NO TRAILING EDGE.
2. SINGLE THICKNESS CONSTRUCTION.




## 4 TURNING VANES
NOT TO SCALE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**DETAILS**

SHEET NUMBER
**M-501**




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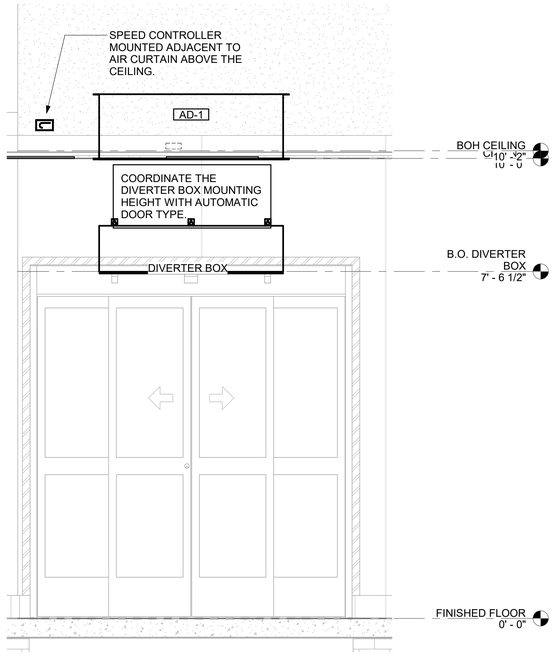
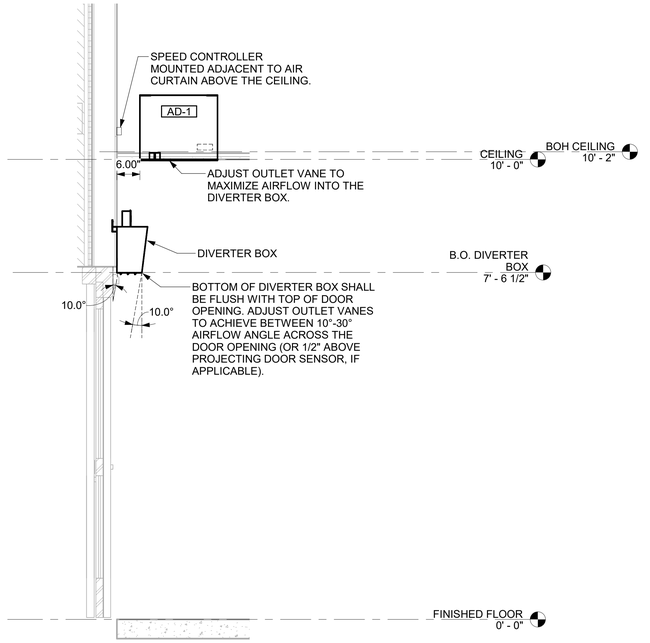
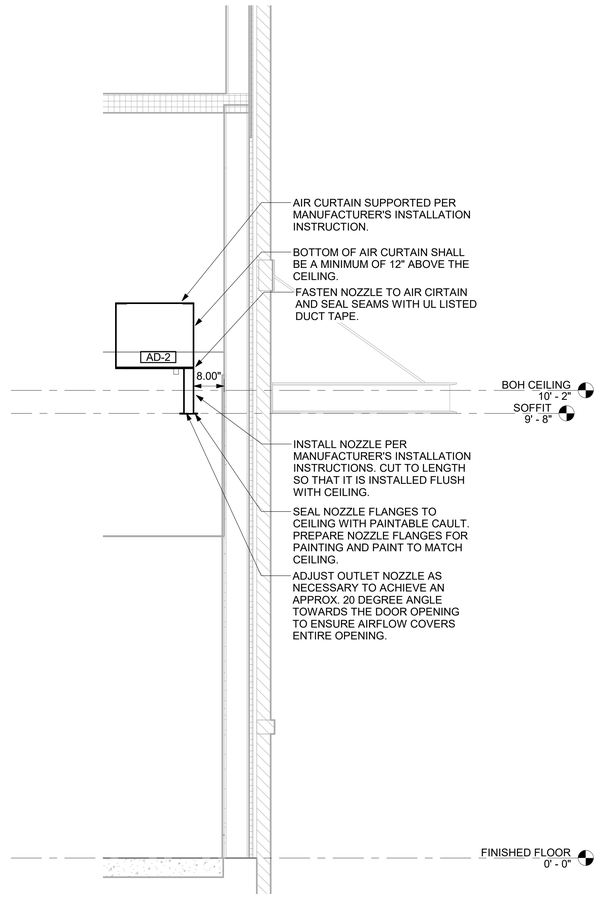


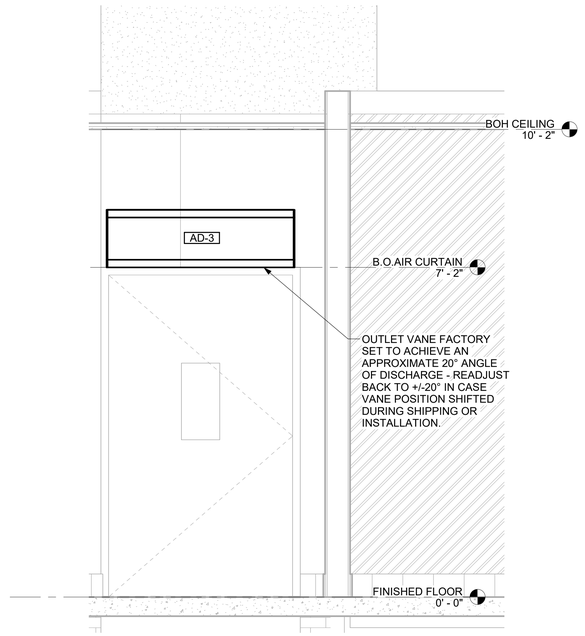

1 AD#1 FRONT VIEW
3/4" = 1'-0"




2 AD#1 SIDE VIEW
3/4" = 1'-0"




3 AD#2 SIDE VIEW
3/4" = 1'-0"




4 AD#3 FRONT VIEW
3/4" = 1'-0"

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SHEET
**DETAILS**

SHEET NUMBER
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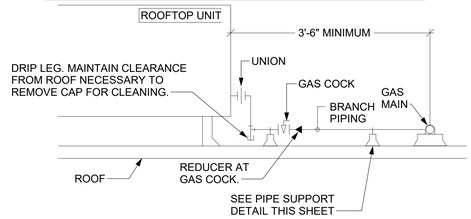
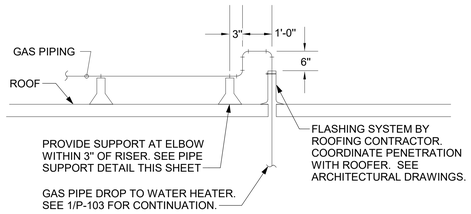
30-SE-05714-M-502-DETAILS

NOTES:
1. INSTALL GAS PIPING SUCH THAT HVAC EQUIPMENT ACCESS PANELS AND/OR DOORS ARE IN NO WAY OBSTRUCTED BY PIPING, VALVES, OR SUPPORTS.
2. TO AVOID CONFLICT WITH AC UNIT ACCESS DOORS, INSTALL GAS PIPING NO CLOSER THAN 3'-6" FROM AC UNIT. (EXCEPT FOR BRANCH LINE CONNECTED TO AC UNIT.)
3. ROUTE BRANCH TAKE-OFF DIRECTLY FROM MAIN TO ROOFTOP UNIT AS SHOWN ON PLAN AND DETAILS WITHOUT LATERAL OFFSETS WHICH MAY OBSTRUCT UNIT ACCESS DOORS.



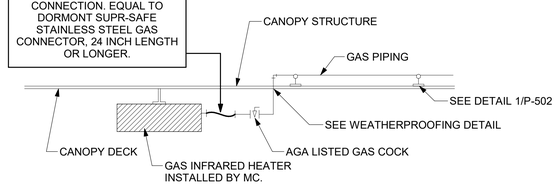

## 3 GAS PIPING AT RTU
NOT TO SCALE

OFFSET PIPING A MINIMUM OF 6" ABOVE TOP EDGE OF FLASHING.

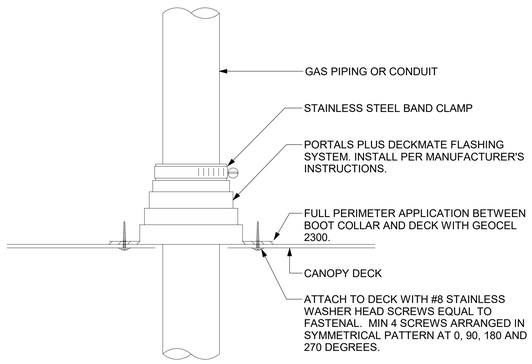



## 2 GAS PIPE DROP TO WATER HEATER
NOT TO SCALE

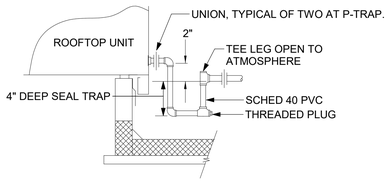
AGA LISTED FLEXIBLE CSST CONNECTION. EQUAL TO DORMONT SUPR-SAFE STAINLESS STEEL GAS CONNECTOR, 24 INCH LENGTH OR LONGER.




## 1 GAS CONNECTION AT APPLIANCE
NOT TO SCALE

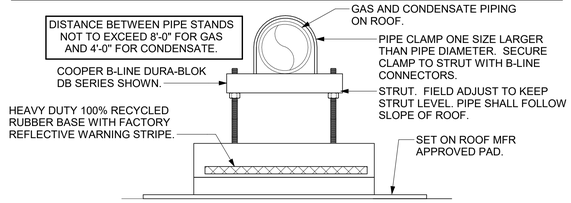



## 6 WEATHERPROOFING AT CANOPY PENETRATION
NOT TO SCALE

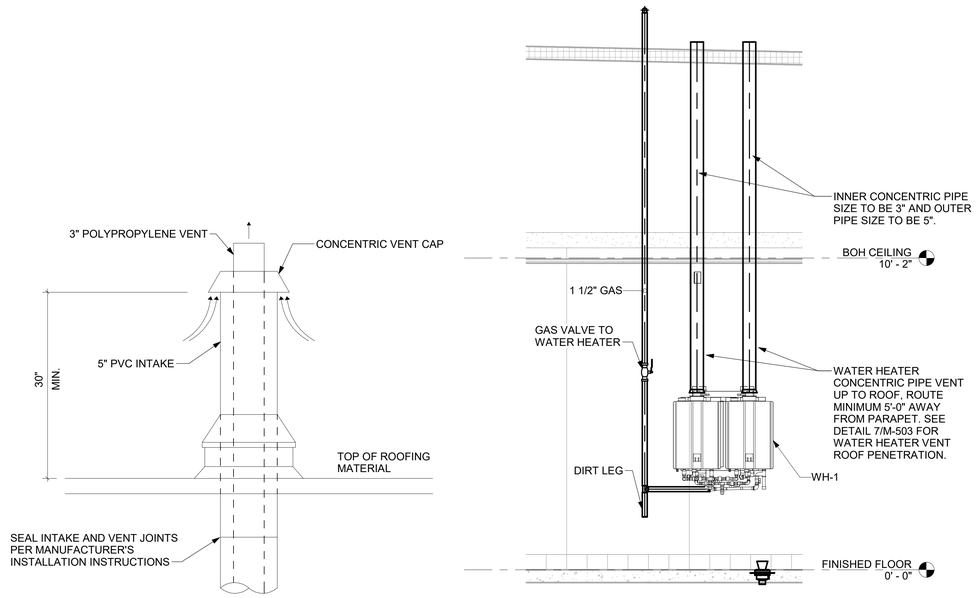



## 5 CONDENSATE DRAIN PIPING
NOT TO SCALE

NOTES:
1. NON ADJUSTABLE MODEL DB610 PIPE STAND TO BE USED FOR NON-ELEVATED PIPING INSTALLED FLAT ON ROOF DECK.
2. PROVIDE MODEL DBE 10-8 OR DBE 10-12 OR DBE 10-16 AS NEEDED FOR ELEVATING CONDENSATE PIPING TO MAINTAIN PROPER SLOPE AND FOR GAS PIPING CROSSING OVER CONDENSATE PIPING.
3. ENSURE GAS AND CONDENSATE PIPING DO NOT OBSTRUCT ROOFTOP EQUIPMENT ACCESS OPENINGS. RE-PIPING OF SYSTEMS DUE TO CONFLICTS WITH EQUIPMENT ACCESS OPENINGS SHALL BE DONE AT PLUMBING CONTRACTOR'S EXPENSE.




## 4 PIPING SUPPORT ON ROOF
NOT TO SCALE




## 8 WATER HEATER VENT ROOF PENETRATION
NOT TO SCALE

## 7 WATER HEATER GAS PIPING AND VENTING
NOT TO SCALE


Chick-fil-A
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CORPORATE SEAL:

STATE OF SOUTH CAROLINA — INTERPLAN, LLC — ORLANDO, FL 01060 — REGISTERED ARCHITECT

SOUTH CAROLINA — INTERPLAN, LLC — No. C02393 — CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
## BUSH RIVER ROAD
NW CORNER OF COLONIAL LIFE BLVD W & BUSH RIVER RD
COLUMBIA, SC 29210

# FSR#05714

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
PRINTED FOR **BID**

**REVISION SCHEDULE**

| NO. | DATE | DESCRIPTION |
|---|---|---|

CONSULTANT PROJECT # 2024.0344
DATE 12/20/24
DRAWN BY JR

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SHEET
**DETAILS**

SHEET NUMBER
**M-503**




1/27/2025 2:30:25 PM Autodesk Docs://SC_05714_Bush River Road_2024.8_REI/05714_Bush River Road_MEC.rvt
30-SE-05714-M-503-DETAILS

# ROOFTOP UNIT SCHEDULE - LENNOX

| MARK | MANUFACTURER | MODEL | EER | IEER/SEER | TOTAL WEIGHT | SUPPLY AIRFLOW (CFM) | OA (CFM) | HP | ESP (in-wg) | TOTAL COOLING MBH | SENSIBLE COOLING MBH | HEATING INPUT MBH | HEATING OUTPUT MBH | VOLTAGE (V) | PHASE | MCA (A) | MOCP (A) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AC-1 | LENNOX | LGT300S4M | 10.3 | 14.5 | 3199.00 lb | 8,125 | 1,750 | 7.5 | 0.80 | 278.3 | 210.5 | 480 | 389 | 208 | 3 | 135 | 150 | 1,3,4,5,6,7,8,9,10,11,12,14,15,16,17 |
| AC-2 | LENNOX | LGT156H4M | 12.0 | 15.5 | 2494.00 lb | 4,375 | 1,075 | 3 | 0.80 | 156.0 | 109.9 | 360 | 292 | 208 | 3 | 64 | 80 | 2,3,4,5,6,7,8,9,10,11,12,14,15,16,17 |
| AC-3 | LENNOX | LGT180H4M | 12.0 | 15 | 2614.00 lb | 5,250 | 1,275 | 3 | 0.80 | 174.7 | 131.7 | 480 | 389 | 208 | 3 | 64 | 70 | 2,3,4,5,6,7,8,9,10,11,12,14,15,16,17 |
| AC-4 | LENNOX | LGT060H4E | 12.7 | 17.1 | 1007.00 lb | 1,750 | 425 | 1.5 | 0.80 | 60.1 | 44.8 | 150 | 121 | 208 | 3 | 25 | 35 | 2,3,4,5,6,7,8,9,10,11,12,14,15,16,17 |
| AC-5 | LENNOX | LGT060H4E | 12.7 | 17.1 | 1007.00 lb | 1,750 | 250 | 1.5 | 0.80 | 60.1 | 44.8 | 150 | 121 | 208 | 3 | 25 | 35 | 2,3,4,5,6,7,8,9,10,11,12,14,15,16,17 |

NOTES
- MECHANICAL CONTRACTOR TO VERIFY LENNOX SUBMITTAL WITH CONSTRUCTION DOCUMENTS. NATIONAL ACCOUNT - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004.

REMARKS
1. DIFFERENTIAL ENTHALPY ECONOMIZER WITH POWER EXHAUST.
2. DIFFERENTIAL ENTHALPY ECONOMIZER WITH BAROMETRIC EXHAUST.
3. 14" HIGH ROOF CURB.
4. SEE DETAIL 2/M-701L FOR SETTING OF CONTROL PARAMETERS BY MC.
5. FACTORY INSTALLED 115V GFI SERVICE OUTLET. SEPERATE 115V CIRCUIT PROVIDED BY ELECTRICAL CONTRACTOR.
6. FACTORY INSTALLED RETURN AIR SMOKE DETECTOR.
7. FACTORY INSTALLED NON-FUSED DISCONNECT.
8. 2" MERV 8 THROW AWAY FILTERS.
9. HINGED PANELS FOR ACCESS TO FILTER(S), FAN BLOWER & MOTOR, COMPRESSOR(S) ACCESS AND CONTROLS.
10. FACTORY COIL HAIL GUARD, FIELD INSTALLED.
11. FRESH AIR TEMPERING KIT.
12. HOT GAS DEHUMIDIFICATION OPTION WITH WALL MOUNTED HUMIDITY SENSOR.
13. NOT USED.
14. FACTORY CONFIGURED PHASE LOSS PROTECTION.
15. FACTORY INSTALLED CONDENSATE PAN DRAIN OVERFLOW SWITCH.
16. FACTORY STAINLESS STEEL HEAT EXHANGER.
17. 100K SCCR RATING.

# HOOD SCHEDULE

| MARK | MANUFACTURER | MODEL | EXHAUST CFM | SP @ TAB PORT (in-wg) | CAPTURE JET CFM & S.P. | TYPE | COLLAR SIZE | WIDTH | DEPTH | HEIGHT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HOOD-1L | HALTON | KVL-2 IC | 1,204 | 0.13 | 80 @ 0.30" | BACKSHELF | 14"X8" | 107" | 37" | 38" | 1, 2, 3, 4, 5, 7, 8, 9, 12, 16, 21, 23 |
| HOOD-1R | HALTON | KVL-2 IC | 709 | 0.13 | 47 @ 0.30" | BACKSHELF | 8"X8" | 63" | 37" | 38" | 1, 2, 3, 5, 7 ,8, 9, 12, 20, 21, 22 |
| HOOD-2 | HALTON | KVL-C-IC | 701 | 0.3 | 30 @ 0.29" | BACKSHELF | 8"X8" | 42" | 34" | 38" | 1, 2, 3, 6, 7, 8, 9, 13, 15, 16, 18, 21 |
| HOOD-3 | HALTON | KVL-C-IC | 701 | 0.3 | 30 @ 0.29" | BACKSHELF | 8"X8" | 42" | 34" | 38" | 1, 2, 3, 4, 6, 7, 8, 9, 13, 17, 21 |

NOTES
- DIMENSIONS OF HOODS INCLUDE BACK AND SIDE SPACERS (HEIGHT DOES NOT INCLUDE CLOSURE PANELS). NATIONAL ACCOUNTS - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004.

REMARKS
1. STAINLESS STEEL CONSTRUCTION.
2. PROVIDE FULL HEIGHT SS CLOSURE PANEL WITH ACCESS PANEL IN FRONT LARGE ENOUGH TO REMOVE CAPTURE JET FAN, FIRE SUPPRESSION COMPONENTS, AND/OR TO ACCESS KBD EQUALIZER JACK SCREW.
3. PRE-PIPED FIRE SUPPRESSION SYSTEM.
4. FIRE SUPPRESSION CABINET AND COMPONENTS ABOVE HOOD ON LEFT SIDE.
5. 3" ZERO CLEARANCE TO COMBUSTIBLE BACK SPACER.
6. 3" ZERO CLEARANCE TO COMBUSTIBLE CUSTOM BACK SPACER TO ACCOMMODATE PIN AND SLEEVE ELECTRICAL BOX.
7. EQUIPMENT I.D. LABELS LOCATED ON FRONT LEADING EDGE OF HOOD.
8. FACTORY WALL MOUNTING ANGLE AT TOP OF HOOD.
9. INTEGRAL CAPTURE JET FAN.
10. NOT USED.
11. NOT USED.
12. NOT USED.
13. PIN AND SLEEVE ELECTRICAL BOX (DOUBLE CONNECTION). SEE ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
14. NOT USED.
15. 3" ZERO CLEARANCE TO COMBUSTIBLE RIGHT SIDE SPACER.
16. NOTCHED LEFT END SIDE PANEL.
17. NOTCHED RIGHT END SIDE PANEL.
18. 3"X3" HORIZONTAL AND VERTICAL TRIM ANGLE FOR RIGHT SIDE OF HOOD TO FINISH OFF GAP AT WALL.
19. FULL LEFT END SIDE PANEL.
20. FULL RIGHT END SIDE PANEL.
21. HALTON KBD EQUALIZER.
22. CONTINUOUS CAPTURE INTERNAL LEFT END CUTOUT.
23. CONTINUOUS CAPTURE INTERNAL RIGHT END CUTOUT.

# HEATER SCHEDULE

| MARK | MANUFACTURER | MODEL | HEATIING INPUT INPUT (kW) | HEATIING INPUT INPUT (MBH) | FRAME LENGTH | FRAME WIDTH | FRAME HEIGHT | MOUNTING TYPE | VOLTAGE (V) | PHASE | FLA (A) | MOCP (A) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EIH-1 | BROMIC | BH0420035 | 6.00 | 0.0 | 56" | 8.5" | 3.5" | WALL BRACKET | 208 | 1 | 28.9 | 40 | 1, 2, 3, 4 |
| IRH | SPACE-RAY | WB50 | 0.00 | 50.0 | 48" | 13.37" | 9.5" | BRACKET | 120 | 1 | 0.4 | 20 | 1, 5, 6, 7 |

NOTES
- CONFIRM HEATER QUANTITY WITH CANOPY SHOP DRAWINGS.
- NATIONAL ACCOUNT NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004.

REMARKS
1. STAINLESS STEEL LENS WITH BLACK EMISSIVE COATING.
2. PROVIDE ENGRAVED PLASTIC LABEL AT EACH UNIT WITH UNIT DESIGNATION IN 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND.
3. PROVIDE BLACK HEATER WITH HIGH TEMPERATURE COATING, AND MANUFACTURER MOUNTING BRACKETS.
4. PROVIDE BROMIC WALL MOUNTED ELECTRIC HEATER MODEL: BH0420033 FOR 220-240V SITES.
5. STEEL BURNER WITH CERAMIC BURNER TILES.
6. PROVIDE ENGRAVED PLASTIC LABEL AT EACH UNIT WITH UNIT DESIGNATION IN 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND. MOUNT TO CANOPY DECK, FACING FORWARD, 12" LATERALLY FROM THE LONG SIDE OF THE HEATER.
7. STAINLESS STEEL HEAT SHIELDS.

# FAN SCHEDULE

| MARK | AREA SERVED | MANUFACTURER | MODEL | TOTAL WEIGHT | FAN CFM | ESP (in-wg) | HP | MOTOR RPM | VOLTAGE (V) | PHASE | FLA (A) | MOCP (A) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CF-1 | OUTDOOR CANOPY | TPI | U-18-TE-HD | 20.00 lb | 1,900 | 0.01 | 0.1 | 1,625 | 120 | 1 | 1.1 | 20 | 20,21,24 |
| EF-1 | HOOD#1 | HALTON | KEFB-14-CFA | 393.00 lb | 1,913 | 0.75 | 0.75 | 1,331 | 120 | 1 | 0 | 25 | 1,2,3,4,5,6,7,8,9,10,11 |
| EF-2 | HOOD#2 & HOOD#3 | HALTON | KEFB-14-CFA | 393.00 lb | 1,402 | 0.95 | 0.75 | 1,199 | 115 | 1 | 0 | 25 | 1,2,3,4,5,6,7,8,9,10,11 |
| EF-3 | RESTROOMS | ACCUREX | XRED-095-VG | 49.00 lb | 300 | 0.375 | 0.125 | 1,550 | 120 | 1 | 2.2 | 20 | 1,3,11,12,13,14,15,16 |
| TF-1 | TECH CLOSET | GREENHECK | SP-A510-VG | 33.00 lb | 450 | 0.3 | 0.127 | 1,144 | 120 | 1 | 2.5 | 0 | 1,17,18,19 |

NOTES
- GREASE EXHAUST FAN RPM BASED ON 80 DEGREE F AIR AT 1000 FEET ABOVE SEA LEVEL.

REMARKS
1. FANS SUPPLIED BY HALTON.
2. U.L. 705 LISTED AND LABELED FOR RESTUARANT APPLICATIONS.
3. FACTORY INSTALLED PREWIRED DISCONNECT SWITCH.
4. 19" HIGH ROOF CURB.
5. INSTALL ROOFTOP SOLUTIONS G2 DRIP GUARD. MECHANICAL CONTRACTOR TO CONTACT ROOFTOP SOLUTIONS AT 800-913-7034.
6. FACTORY WEATHER HOUSING W/ HINGED ACCESS DOOR.
7. FACTORY DRAIN CONNECTION.
8. FACTORY BOLTED ACCESS DOOR ON SCROLL.
9. FACTORY INSTALLED BELT DRIVE WITH ADJUSTABLE MOTOR SHEAVE, SPARE BELT, AND BELT TENSIONER.
10. FACTORY INSTALLED OUTLET WITH QUICK RELEASE, HINGED ACCESS, AND GRAVITY BACKDRAFT DAMPER.
11. INTEGRAL THERMAL OVERLOAD.
12. BIRDSCREEN.
13. BACKDRAFT DAMPER IN DUCT BY MECHANICAL CONTRACTOR AS SHOWN ON 5/M-501.
14. STARTER BY ELECTRICAL CONTRACTOR. INTERLOCK WITH LIGHTS BY ELECTRICAL CONTRACTOR.
15. 12" HIGH CURB.
16. FACTORY INSTALLED AND WIRED SPEED CONTROLLER.
17. PROVIDE NEMA 1 PREWIRED DISCONNECT.
18. INTEGRAL POTENTIOMETER ON FAN MOTOR. SET TO FULL SPEED.
19. PROVIDE THERMOSTAT / TEMPEERATURE CONTROLLER, SET TO 76°F.
20. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
21. PROVIDE WITH ON/OFF SWITCH.
22. NOT USED.
23. NOT USED.
24. FAN SUPPLIED BY TOM BARROW OR POWERS OF ARKANSAS FOR THE SOUTHWEST REGION.

# AIR DOOR SCHEDULE

| MARK | AREA SERVED | MANUFACTURER | MODEL | CFM | VELOCITY (FPM) | HEATING (KW) | MOTOR HP | MCA (A) | MOCP (A) | VOLTAGE (V) | PHASE | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AD-1 | DRIVE THRU | POWERED AIRE | CHA-1-48E | 1,543 | 2,338 | 10 | 0.75 | 31.4 | 40 | 208 | 3 | 1, 2, 3, 5 |
| AD-2 | SERVING | POWERED AIRE | ETA-1-36E | 1,197 | 2,443 | 10 | 0.75 | 31.4 | 40 | 208 | 3 | 1, 2, 3, 6 |
| AD-3 | REAR DOOR | POWERED AIRE | RBT-1-48 | 3,867 | 4,218 | 0 | 0.75 | 3.6 | 20 | 208 | 1 | 4 |

NOTES
- NATIONAL ACCOUNT - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004

REMARKS
1. FACTORY PROVIDED, WIRED, AND UNIT MOUNTED SPEED CONTROLLER ABOVE CEILING.
2. FACTORY WIRED DISCONNECT.
3. FACTORY PROVIDED, FIELD INSTALLED BY MC, REMOTE WALL SWITCHES FOR HEATING ON/OFF AND FAN ON/AUTO SWITCH. SEE DETAILS ON M502.
4. FACTORY PROVIDED MAGNETIC DOOR CONTACT WITH FACTORY INSTALLED LOW VOLTAGE CONTROLS LOCATED IN AIR DOOR CABINET.
5. PROVIDE WITH A DIVERTER BOX. PROVIDE WITH MOUNTING BRACKETS PER MANUFACTURER'S RECOMMENDATIONS.
6. PROVIDE WITH NOZZLE EXTENSION, SEE DETAIL M502 .

# AIR DEVICE SCHEDULE

| MARK | DESCRIPTION | LOCATION | NECK SIZE | FACE SIZE | FRAME TYPE | REMARKS |
|---|---|---|---|---|---|---|
| <varies> | <varies> | PLAY AREA | <varies> | <varies> | SURFACE | 1 |
| A | PRICE MODEL APDC ALUMINUM SUPPLY AIR DIFFUSER WITH INDIVIDUALLY ADJUSTABLE CURVED AIR PATTERN CONTROLLERS. | DINING/KITCHEN | VARIES | 24"x24" | LAY-IN | 1,7 |
| B | VARITHERM PLAQUE DIFFUSER | OFFICE | 8" | 24"x24" | LAY-IN | 1,7,8 |
| C | PRICE MODEL SMCD STEEL SUPPLY AIR DIFFUSER FIELD ADJUSTABLE AIR PATTERN CONTROLLERS. | ENTRY | 16"x16" | 19"x19" | BEVELLED | 1,3,5,6 |
| D | PRICE MODEL APDC ALUMINUM SUPPLY AIR DIFFUSER WITH INDIVIDUALLY ADJUSTABLE CURVED AIR PATTERN CONTROLLERS. | DINING | VARIES | 16"x16" | SURFACE | 1,3,5,6 |
| F | PRICE MODEL 80 EGGCRATE RETURN AIR GRILLE WITH REMOVABLE WHITE CORE, FACTORY FLAT BLACK BACKPAN AND ROUND NECK. | DINING / OFFICE / KITCHEN | VARIES | 24"x24" | LAY-IN | 1,7 |
| FF | PRICE MODEL 80FF STEEL FILTER RETURN AIR GRILLE WITH REMOVABLE WHITE CORE, FACTORY FLAT BLACK BACKPAN AND ROUND NECK. | MFA | VARIES | 24"x24" | LAY-IN | 1,7 |
| J | PRICE MODEL SMCD STEEL SUPPLY AIR DIFFUSER FIELD ADJUSTABLE AIR PATTERN CONTROLLERS. | RESTROOMS | 10"x10" | 15"x15" | BEVELLED | 1,2,3,5,6 |
| K | PRICE MODEL APDDR ALUMINUM PERFORATED FACE RETURN AIR GRILLE. | RESTROOMS/ ENTRY | 14"x14" | 16"x16" | SURFACE | 1,4,5,6 |

NOTES
- NATIONAL ACCOUNT - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004

REMARKS
1. STANDARD OFF WHITE FINISH.
2. PROVIDE MODEL VCS3 NECK DAMPER.
3. SEE DRAWING M-101 FOR THROW.
4. PROVIDE MODEL VCR7 NECK DAMPER ON GRILLES IN RESTROOMS SERVING EXHAUST FAN.
5. PROVIDE BACKPAN. MC TO SEAL JOINTS WITH MASTIC AND INSULATE EXTERNALLY.
6. FIELD INSULATE BACKPAN AS SHOWN ON DETAIL 3/M-501.
7. FACTORY INSULATED R-6 BACKPAN.
8. PROVIDE RELIEF COLLAR ACCESSORY FOR VAV DIFFUSER.


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SOUTH CAROLINA — INTERPLAN, LLC No. C02393 — CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
## BUSH RIVER ROAD
NW CORNER OF COLONIAL
LIFE BLVD W & BUSH RIVER RD
COLUMBIA, SC 29210

# FSR#05714

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
PRINTED FOR
**BID**

**REVISION SCHEDULE**

| NO. | DATE | DESCRIPTION |
|---|---|---|

CONSULTANT PROJECT # 2024.0344
DATE 12/20/24
DRAWN BY JR



SHEET
**EQUIPMENT SCHEDULES - LENNOX**

SHEET NUMBER
# M-601L




1/27/2025 2:30:27 PM Autodesk Docs://SC_05714_Bush River Road_2024.8_REI/05714_Bush River Road_MEC.rvt
30-SE-05714-M-601L-EQUIPMENT SCHEDULES - LENNOX

# VENTILATION SCHEDULE

| General | | | Ventilation | | | | | | | | | | | | | Exhaust | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | People | | | | Area | | | | | | | | | Area | | Toilet | | | | Served by | |
| Room # | Room Name | Area Az ft2 | Occupant Density People/1,000 ft2 | Occupants People Pz | Outdoor Airflow Rate CFM/Person Rp | Outdoor Airflow CFM Pz x Rp | Outdoor Airflow Rate CFM/ft2 Ra | Outdoor Airflow CFM Az x Ra | Breathing Zone Outdoor Airflow CFM Vbz | Zone Air Distribution Effectiveness Ez | Zone Outdoor Airflow CFM Voz | Primary Zone Airflow CFM Vpz | Primary Outdoor Air Fraction Zp | Actual Outdoor Airflow CFM | Required Exhaust Rate CFM/ft2 | Total Required Exhaust CFM | Exhaust Control/ Operation | Fixture Exhaust Rate CFM/Fixture | Required Fixture Exhaust CFM | Actual Exhaust CFM | Supply | Exhaust |
| 1 | Kitchen | 1,060 | 20 | 22 | 7.5 | 165 | 0.12 | 127 | 292 | 0.8 | 366 | 7,700 | 0.05 | 1,658 | 1 | 742 | - | - | - | 3,315 | AC-1L /AC-1T | EF-1 / EF-2 |
| 2 | Kitchen (Dish Washing) | 161 | 15 | 3 | 7.5 | 23 | 0.18 | 29 | 51 | 0.8 | 65 | 425 | 0.15 | 92 | - | - | - | - | - | - | AC-1L /AC-1T | - |
| | **Total Area** | **1,221** | | | | | | | **Total Vbz** | **344** | | **Total Supply Airflow** | **8,125** | | **1,750** | **Actual Outdoor Airflow** | | | | | | |
| | | | | | | | | | **Diversity (D)** | **0.80** | | | **Maximum Zp** | **0.15** | | | | | | | | | |
| | | | | | | | | | **Uncorrected Outdoor Air Intake (Vou)** | **312** | | **System Ventilation Efficiency (Ev)** | | **0.90** | | | | | | | | |
| | | | | | | | | | **Required Outdoor Air Intake (CFM)** | | | **347** | | | | | | | | | | |

# VENTILATION SCHEDULE

| General | | | Ventilation | | | | | | | | | | | | | Exhaust | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | People | | | | Area | | | | | | | | | Area | | Toilet | | | | Served by | |
| Room # | Room Name | Area Az ft2 | Occupant Density People/1,000 ft2 | Occupants People Pz | Outdoor Airflow Rate CFM/Person Rp | Outdoor Airflow CFM Pz x Rp | Outdoor Airflow Rate CFM/ft2 Ra | Outdoor Airflow CFM Az x Ra | Breathing Zone Outdoor Airflow CFM Vbz | Zone Air Distribution Effectiveness Ez | Zone Outdoor Airflow CFM Voz | Primary Zone Airflow CFM Vpz | Primary Outdoor Air Fraction Zp | Actual Outdoor Airflow CFM | Required Exhaust Rate CFM/ft2 | Total Required Exhaust CFM | Exhaust Control/ Operation | Fixture Exhaust Rate CFM/Fixture | Required Fixture Exhaust CFM | Actual Exhaust CFM | Supply | Exhaust |
| 5 | Meal Fulfillment Area | 453 | 15 | 7 | 7.5 | 52.5 | 0.18 | 82 | 134 | 0.8 | 168 | 4,375 | 0.04 | 1,075 | - | - | - | - | - | - | AC-2L / AC-2T | - |
| | **Total Area** | **453** | | | | | | | **Total Vbz** | **134** | | **Total Supply Airflow** | **4,375** | | **1,075** | **Actual Outdoor Airflow** | | | | | | |
| | | | | | | | | | **Diversity (D)** | **1.00** | | | **Maximum Zp** | **0.03** | | | | | | | | | |
| | | | | | | | | | **Uncorrected Outdoor Air Intake (Vou)** | **134** | | **System Ventilation Efficiency (Ev)** | | **1.00** | | | | | | | | |
| | | | | | | | | | **Required Outdoor Air Intake (CFM)** | | | **134** | | | | | | | | | | |

# VENTILATION SCHEDULE

| General | | | Ventilation | | | | | | | | | | | | | Exhaust | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | People | | | | Area | | | | | | | | | Area | | Toilet | | | | Served by | |
| Room # | Room Name | Area Az ft2 | Occupant Density People/1,000 ft2 | Occupants People Pz | Outdoor Airflow Rate CFM/Person Rp | Outdoor Airflow CFM Pz x Rp | Outdoor Airflow Rate CFM/ft2 Ra | Outdoor Airflow CFM Az x Ra | Breathing Zone Outdoor Airflow CFM Vbz | Zone Air Distribution Effectiveness Ez | Zone Outdoor Airflow CFM Voz | Primary Zone Airflow CFM Vpz | Primary Outdoor Air Fraction Zp | Actual Outdoor Airflow CFM | Required Exhaust Rate CFM/ft2 | Total Required Exhaust CFM | Exhaust Control/ Operation | Fixture Exhaust Rate CFM/Fixture | Required Fixture Exhaust CFM | Actual Exhaust CFM | Supply | Exhaust |
| 1 | Dining | 1,374 | 70 | 97 | 7.5 | 727.5 | 0.18 | 247 | 975 | 0.8 | 1219 | 3,900 | 0.312 | 947 | - | - | - | - | - | - | AC-3L / AC-3T | - |
| 2 | Serving | 300 | 15 | 5 | 7.5 | 38 | 0.18 | 54 | 92 | 0.8 | 115 | 500 | 0.23 | 121 | - | - | - | - | - | - | AC-3L / AC-3T | - |
| 3 | Men's RR | 155 | - | - | - | - | - | - | - | 0.8 | - | 100 | - | 24 | - | - | Continuous | 50 | 100 | 150 | AC-3L / AC-3T | EF-3 |
| 4 | Women's RR | 156 | - | - | - | - | - | - | - | 0.8 | - | 100 | - | 24 | - | - | Continuous | 50 | 100 | 150 | AC-3L / AC-3T | EF-3 |
| 5 | RR Vestibule | 100 | - | - | - | - | 0.06 | 6 | 6 | 0.8 | 8 | 50 | 0.15 | 12 | - | - | - | - | - | - | AC-3L / AC-3T | - |
| 6 | Exit Vestibule | 36 | - | - | - | - | 0.06 | 2 | 2 | 0.8 | 3 | 200 | 0.01 | 49 | - | - | - | - | - | - | AC-3L / AC-3T | - |
| 7 | Entry Vestibule | 77 | - | - | - | - | 0.06 | 5 | 5 | 0.8 | 6 | 400 | 0.01 | 97 | - | - | - | - | - | - | AC-3L / AC-3T | - |
| | **Total Area** | **2,198** | | | | | | | **Total Vbz** | **1,079** | | **Total Supply Airflow** | **5,250** | | **1,275** | **Actual Outdoor Airflow** | | | | | | |
| | | | | | | | | | **Diversity (D)** | **0.80** | | | **Maximum Zp** | **0.312** | | | | | | | | | |
| | | | | | | | | | **Uncorrected Outdoor Air Intake (Vou)** | **1,018** | | **System Ventilation Efficiency (Ev)** | | **0.80** | | | | | | | | |
| | | | | | | | | | **Required Outdoor Air Intake (CFM)** | | | **1,271** | | | | | | | | | | |

# VENTILATION SCHEDULE

| General | | | Ventilation | | | | | | | | | | | | | Exhaust | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | People | | | | Area | | | | | | | | | Area | | Toilet | | | | Served by | |
| Room # | Room Name | Area Az ft2 | Occupant Density People/1,000 ft2 | Occupants People Pz | Outdoor Airflow Rate CFM/Person Rp | Outdoor Airflow CFM Pz x Rp | Outdoor Airflow Rate CFM/ft2 Ra | Outdoor Airflow CFM Az x Ra | Breathing Zone Outdoor Airflow CFM Vbz | Zone Air Distribution Effectiveness Ez | Zone Outdoor Airflow CFM Voz | Primary Zone Airflow CFM Vpz | Primary Outdoor Air Fraction Zp | Actual Outdoor Airflow CFM | Required Exhaust Rate CFM/ft2 | Total Required Exhaust CFM | Exhaust Control/ Operation | Fixture Exhaust Rate CFM/Fixture | Required Fixture Exhaust CFM | Actual Exhaust CFM | Supply | Exhaust |
| 1 | Flex/Employee RR | 62 | - | - | - | - | - | - | - | 0.8 | - | 40 | - | 10 | - | - | Intermittent | 70 | 70 | 75 | AC-4L / AC-4T | EF-4 |
| 2 | Service | 122 | - | - | - | - | 0.12 | 15 | 15 | 0.8 | 19 | 385 | 0.05 | 94 | - | - | - | - | - | - | AC-4L / AC-4T | - |
| 3 | Team Member Room | 171 | 50 | 9 | 5 | 45 | 0.06 | 10 | 55 | 0.8 | 70 | 700 | 0.10 | 170 | - | - | - | - | - | - | AC-4L / AC-4T | - |
| 4 | Office | 70 | 5 | 1 | 5 | 5 | 0.06 | 4 | 9 | 0.8 | 12 | 200 | 0.06 | 49 | - | - | - | - | - | - | AC-4L / AC-4T | - |
| 5 | Riser Room | 107 | - | - | - | - | 0.12 | 13 | 13 | 0.8 | 17 | 425 | 0.04 | 103 | - | - | - | - | - | - | AC-4L / AC-4T | - |
| | **Total Area** | **532** | | | | | | | **Total Vbz** | **92** | | **Total Supply Airflow** | **1,750** | | **425** | **Actual Outdoor Airflow** | | | | | | |
| | | | | | | | | | **Diversity (D)** | **0.90** | | | **Maximum Zp** | **0.09** | | | | | | | | | |
| | | | | | | | | | **Uncorrected Outdoor Air Intake (Vou)** | **88** | | **System Ventilation Efficiency (Ev)** | | **1.00** | | | | | | | | |
| | | | | | | | | | **Required Outdoor Air Intake (CFM)** | | | **87** | | | | | | | | | | |


Chick-fil-A
5200 Buffington Road
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30349-2998

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CORPORATE SEAL:

STATE OF SOUTH CAROLINA
INTERPLAN, LLC
ORLANDO, FL
01060
REGISTERED ARCHITECT

SOUTH CAROLINA
INTERPLAN, LLC
No. C02393
CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
## BUSH RIVER ROAD
## NW CORNER OF COLONIAL LIFE BLVD W & BUSH RIVER RD
## COLUMBIA, SC 29210

# FSR#05714

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
PRINTED FOR
**BID**

**REVISION SCHEDULE**

| NO. | DATE | DESCRIPTION |
|---|---|---|

CONSULTANT PROJECT # 2024.0344
DATE 12/20/24
DRAWN BY JR



SHEET
**VENTILATION SCHEDULES**

SHEET NUMBER
**M-602**




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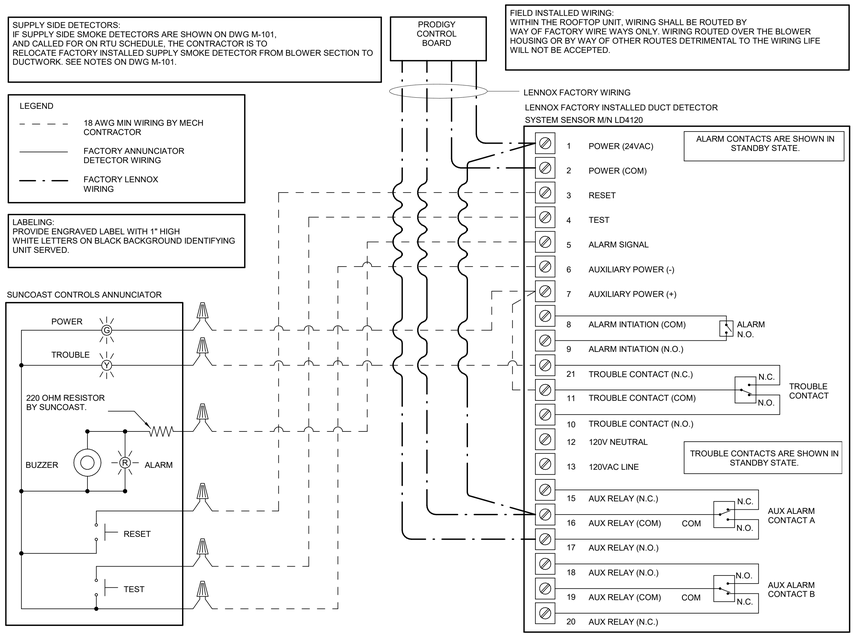
30-SE-05714-M-602-VENTILATION SCHEDULES

SUPPLY SIDE DETECTORS:
IF SUPPLY SIDE SMOKE DETECTORS ARE SHOWN ON DWG M-101, AND CALLED FOR ON RTU SCHEDULE, THE CONTRACTOR IS TO RELOCATE FACTORY INSTALLED SUPPLY SMOKE DETECTOR FROM BLOWER SECTION TO DUCTWORK. SEE NOTES ON DWG M-101.

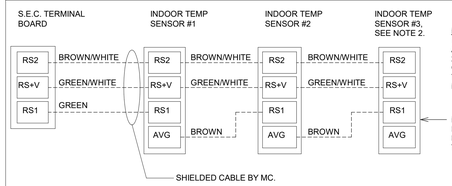
LEGEND
- 18 AWG MIN WIRING BY MECH CONTRACTOR
- FACTORY ANNUNCIATOR DETECTOR WIRING
- FACTORY LENNOX WIRING

LABELING:
PROVIDE ENGRAVED LABEL WITH 1" HIGH WHITE LETTERS ON BLACK BACKGROUND IDENTIFYING UNIT SERVED.




1 SMOKE DETECTOR AND ANNUNCIATOR WIRING DIAGRAM - LENNOX
NOT TO SCALE

## AVERAGING SENSORS (WHERE SHOWN ON PLANS)

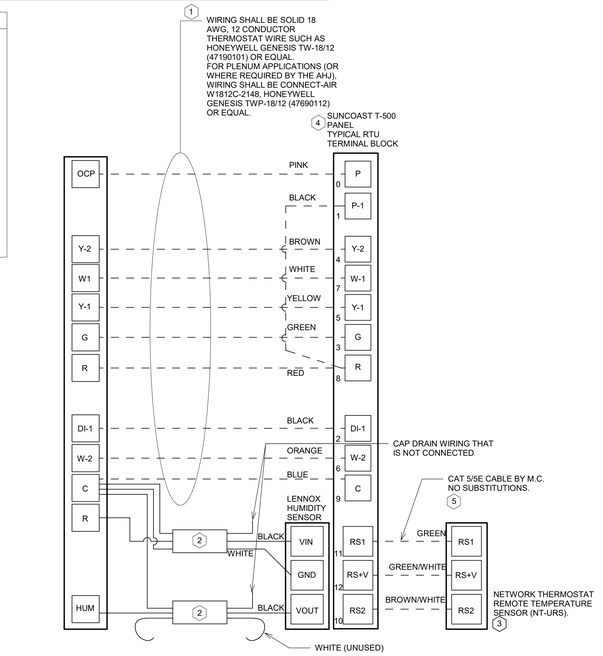



NOTES:
1. SEE DWG M-101 FOR LOCATION AND ARRANGEMENT OF SENSORS.
2. MULTIPLE AVERAGING SENSORS COUNT AS ONE SENSOR. SEE NETWORK THERMOSTAT NT-URS INSTALLATION MANUAL FOR ADDITIONAL INFORMATION.

NETWORK TSTAT REMOTE TEMP SENSOR PROVIDED BY SUNCOAST AND INSTALLED BY MC. FIELD CALIBRATE EACH SENSOR, TYP.

LEGEND

| | |
|---|---|
| S.E.C. | SUNCOAST ENVIRONMENTAL CONTROLS (SUPPLIER OF TEMP/FAN CONTROL PANEL) LOCATED IN KITCHEN |
| 1 | KEY NOTE REFERENCE |
| MC | MECHANICAL CONTRACTOR |
| AC | SUNCOAST RELAY FACTORY INSTALLED AND WIRED IN CFA-500 PANEL, ENERGIZED BY PUTTIN STORE SWITCH IN "STORE OCCUPIED" POSITION |
| AN | SUNCOAST RELAY FACTORY INSTALLED AND WIRED IN CFA-500 PANEL, DEENERGIZED WHEN ANSUL FIR SUPPRESSION SYSTEM IS ACTIVATED AS NOTED |
| ---------- | ALL LOW VOLTAGE CABLING BY MC. ONLY USE CABLE SPECIFIED. NO SUBSTITUTIONS |
| -·-·-·- | LOW VOLTAGE WIRING BY S.E.C. |
| ———— | LINE VOLTAGE BY ELECTRICAIN OR S.E.C. |




2 ROOFTOP UNIT CONTROL WIRING - LENNOX
NOT TO SCALE

KEYED NOTES:

1. LOW VOLTAGE WIRING TO RTU TO BE ROUTED TO UNIT THRU FACTORY WIREWAY.

2. WIRING TO HUMIDITY SENSOR TO BE MADE WITH SINGLE 18/2 SENSOR CABLE; BELDEN 8760 OR EQUAL. HUMIDITROL INTERFACE TO SET RELATIVE HUMIDITY. SET TO 60%.

3. NETWORK TSTAT REMOTE TEMP SENSOR PROVIDED BY SUNCOAST AND INSTALLED BY MC. SENSOR IS INTENDED TO BE SURFACE MOUNTED AND DOES NOT REQUIRE A SINGLE GANG BOX OR CONDUIT. FIELD CALIBRATE EACH SENSOR. SEAL CABLE PENETRATION AT ALL WALL LOCATIONS.

4. FACTORY WIRING IN SUNCOAST T-500 PANEL NOT SHOWN FOR CLARITY. SEE SUNCOAST WIRING DIAGRAM FOR ADDITIONAL INFORMATION.

5. CAT 5/5E CABLE BY M.C. NO SUBSTITUTIONS.

NOTES:

1. PROVIDE A PROFESSIONALLY LAMINATED COPY OF THESE DETAILS TO BE INSTALLED INSIDE THE ROOFTOP UNIT CONTROL CABINENT. 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.

2. SEE DETAILS IN THIS SHEET FOR SMOKE DETECTOR AND ANNUNCIATOR WIRING.

3. SET ALL THERMOSTATS TO AUTO CHANGEOVER.

4. PROVIDE PLASTIC ENGRAVABLE AT ALL SENSORS WITH 1/4" HIGH WHITE LETTERING ON BLACK BACKROUND (E.G., "AC#2 HUMIDITY SENSOR" OR "AC#2 TEMP SENSOR"). PLACE LABELS ON WALL DIRECTLY ABOVE OR BELOW THE SENSOR. DO NOT APPLY LABEL DIRECTLY TO DEVICE.

LENNOX PRODIGY 2.0 OR CORE UNIT CONTROLLER SETTINGS:

1. FOR ALL RTUs, ELIMINATE THE MORNING WARMUP/OSA DAMPER DELAY. THE MENU PATH IS:
   - MAIN MENU > SETTINGS > RTU OPTIONS > EDIT PARAMETERS
   FOR GAS HEAT UNITS (LGT):
   - CHANGE PARAMETER #65 SETTING TO 1
   FOR ELECTRIC HEAT UNITS (LCT):
   - CHANGE PARAMETER #58 TO 1

2. FOR HUMIDITROL UNITS THE MENU PATH IS:
   - MAIN MENU > SETTINGS > RTU OPTIONS > DEHUMIDIFIER MODE > NO CONDITIONS
   SELECT LOCAL SENSOR AND SAVE
   - SET POINT (#106): 60%
   - DEHUMID DEADBAND (#107): 3%

3. ALL — FOR ALL UNITS, SET BLOWER TO OPERATE AT ONE AIRFLOW FOR MODES. MENU PATH IS:
   - MAIN MENU > INSTALL > TEST AND BALANCE > BLOWER
   - SET ALL HEATING AND COOLING CFM VALUES TO THE SAME VALUE AS SCHEDULED.
   - ADJUST AIRFLOW BY MEANS OF ADJUSTABLE BLOWER MOTOR SHEAVE.

LENNOX FRESH AIR TEMPERING SETUP (IF SPECIFIED):

1. INSTALL FRESH AIR TEMPERING KIT WIRING HARNESS AS RECOMMENDED BY LENNOX.

2. LOCATE SUPPLY AIR TEMPERATURE SENSOR IN SUPPLY DUCT DOWNSTREAM OF FIRST ELBOW. SECURE WIRING TO DUCT OR STRUCTURE WITH RUBBER COATED CLAMPS. DO NOT RUN WIRING INSIDE DUCT WORK. PROTECT ALL WIRING PENETRATIONS WITH RUBBER GROMMETS.

3. FOR PRODIGY 2.0 OR CORE UNIT CONTROLLER WITHIN MAIN MENU GO TO SET-UP TO TEST AND BALANCE TO DAMPER. FOLLOW MENU PATH SET FRESH AIR HEATING ENABLE TO "YES" SET FAH SETPOINT TO 66F THIS WILL TEMPER SUPPLY AIR BELOW 66F WITH INTERMITTENT HEATING WHEN THERMOSTAT IS NOT ACTIVELY CALLING FOR HEAT.

4. CHANGE PRODIGY 2.0 OR CORE UNIT CONTROLLER PARAMETER # 157. WITHIN MAIN MENU GO TO SETTINGS TO RTU OPTIONS TO EDIT PARAMETER VALUE TO 14 FOR A 14F FAH DEADBAND AND SAVE.

5. CHANGE PRODIGY 2.0 OR CORE UNIT CONTROLLER PARAMETER # 158. WITHIN MAIN MENU GO TO SETTINGS TO RTU OPTIONS TO EDIT PARAMETER ADJUST VALUE TO 300 SECONDS FOR 5 MINUTE CYCLE TIME AND SAVE.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CORPORATE SEAL:

STATE OF SOUTH CAROLINA — INTERPLAN, LLC — ORLANDO, FL 01060 — REGISTERED ARCHITECT

SOUTH CAROLINA — INTERPLAN, LLC — No. C02393 — CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
## BUSH RIVER ROAD
NW CORNER OF COLONIAL
LIFE BLVD W & BUSH RIVER RD
COLUMBIA, SC 29210

**FSR#05714**

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
PRINTED FOR
**BID**

**REVISION SCHEDULE**

| NO. | DATE | DESCRIPTION |
|---|---|---|

CONSULTANT PROJECT # 2024.0344
DATE 12/20/24
DRAWN BY JR



SHEET
**CONTROL WIRING DIAGRAMS - LENNOX**

SHEET NUMBER
**M-701L**


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30-SE-05714-M-701L-CONTROL WIRING DIAGRAMS - LENNOX

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# Mechanical Compliance Certificate

## Section 1: Project Information

Energy Code: **2009 IECC**
Project Title: 2024.0344 - CFA - RELO - FSU 5714 - Bush River Road, Columbia, SC
Project Type: New Construction

| Construction Site: | Owner/Agent: | Designer/Contractor: |
|---|---|---|
| NW Corner Of Colonial Life BLVD W & Bush River Road<br>Columbia, South Carolina 29210 | Chick-fil-A<br>5200 Buffington Road<br>Atlanta, Georgia 30349 | Interplan LLC<br>220 E Central Pkwy, Ste 4000<br>Altamonte Springs, Florida 32701<br>4076455008 |

## Section 2: General Information

Building Location (for weather data): Columbia, South Carolina
Climate Zone: 3a

## Section 3: Mechanical Systems List

**Quantity** **System Type & Description**

1 AC-1 (Single Zone) :
Heating: 1 each - Central Furnace, Gas, Capacity = 278 kBtu/h
Proposed Efficiency = 80.00% Ec, Required Efficiency: 80.00 % Ec
Cooling: 1 each - Single Package DX Unit, Capacity = 480 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 10.30 EER, Required Efficiency = 9.80 EER
Proposed Part Load Efficiency = 9.50 IPLV, Required Part Load Efficiency = 9.50 IPLV

1 AC-2 (Single Zone) :
Heating: 1 each - Central Furnace, Gas, Capacity = 156 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE)
Cooling: 1 each - Single Package DX Unit, Capacity = 360 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.00 EER, Required Efficiency = 9.80 EER
Proposed Part Load Efficiency = 9.50 IPLV, Required Part Load Efficiency = 9.50 IPLV

1 AC-3 (Single Zone) :
Heating: 1 each - Central Furnace, Gas, Capacity = 174 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE)
Cooling: 1 each - Single Package DX Unit, Capacity = 480 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.00 EER, Required Efficiency = 9.80 EER
Proposed Part Load Efficiency = 9.50 IPLV, Required Part Load Efficiency = 9.50 IPLV

1 AC-4 (Single Zone) :
Heating: 1 each - Central Furnace, Gas, Capacity = 60 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE)
Cooling: 1 each - Single Package DX Unit, Capacity = 150 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.70 EER, Required Efficiency = 10.80 EER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00

1 AC-5 (Single Zone) :
Heating: 1 each - Central Furnace, Gas, Capacity = 60 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et (or 78% AFUE)
Cooling: 1 each - Single Package DX Unit, Capacity = 150 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.70 EER, Required Efficiency = 10.80 EER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00

## Section 4: Requirements Checklist

**Requirements Specific To: AC-1 :**



❑ 1. Equipment minimum efficiency: Central Furnace (Gas): 80.00 % Ec
❑ 2. Equipment minimum efficiency: Single Package Unit: 9.80 EER + 9.5 IPLV
❑ 3. Integrated economizer is required for this location and system.
❑ 4. Cooling system provides a means to relieve excess outdoor air during economizer operation.
❑ 5. Hot gas bypass prohibited unless system has multiple steps of unloading or continuous capacity modulation
❑ 6. Hot gas bypass limited to 25% of total cooling capacity

**Requirements Specific To: AC-2 :**

❑ 1. Equipment minimum efficiency: Central Furnace (Gas): 80.00 % Et (or 78% AFUE)
❑ 2. Equipment minimum efficiency: Single Package Unit: 9.80 EER + 9.5 IPLV
❑ 3. Integrated economizer is required for this location and system.
❑ 4. Cooling system provides a means to relieve excess outdoor air during economizer operation.
❑ 5. Hot gas bypass prohibited unless system has multiple steps of unloading or continuous capacity modulation
❑ 6. Hot gas bypass limited to 25% of total cooling capacity

**Requirements Specific To: AC-3 :**

❑ 1. Equipment minimum efficiency: Central Furnace (Gas): 80.00 % Et (or 78% AFUE)
❑ 2. Equipment minimum efficiency: Single Package Unit: 9.80 EER + 9.5 IPLV
❑ 3. Integrated economizer is required for this location and system.
❑ 4. Cooling system provides a means to relieve excess outdoor air during economizer operation.
❑ 5. Hot gas bypass prohibited unless system has multiple steps of unloading or continuous capacity modulation
❑ 6. Hot gas bypass limited to 25% of total cooling capacity

**Requirements Specific To: AC-4 :**

❑ 1. Equipment minimum efficiency: Central Furnace (Gas): 80.00 % Et (or 78% AFUE)
❑ 2. Equipment minimum efficiency: Single Package Unit: 10.80 EER
❑ 3. Integrated economizer is required for this location and system.
❑ 4. Cooling system provides a means to relieve excess outdoor air during economizer operation.
❑ 5. Hot gas bypass prohibited unless system has multiple steps of unloading or continuous capacity modulation
❑ 6. Hot gas bypass limited to 50% of total cooling capacity

**Requirements Specific To: AC-5 :**

❑ 1. Equipment minimum efficiency: Central Furnace (Gas): 80.00 % Et (or 78% AFUE)
❑ 2. Equipment minimum efficiency: Single Package Unit: 10.80 EER
❑ 3. Integrated economizer is required for this location and system.
❑ 4. Cooling system provides a means to relieve excess outdoor air during economizer operation.
❑ 5. Hot gas bypass prohibited unless system has multiple steps of unloading or continuous capacity modulation
❑ 6. Hot gas bypass limited to 50% of total cooling capacity

**Generic Requirements: Must be met by all systems to which the requirement is applicable:**

❑ 1. Plant equipment and system capacity no greater than needed to meet loads
*Exception(s):*
❑ Standby equipment automatically off when primary system is operating
❑ Multiple units controlled to sequence operation as a function of load
❑ 2. Minimum one temperature control device per system
❑ 3. Minimum one humidity control device per installed humidification/dehumidification system
❑ 4. Load calculations per ASHRAE/ACCA Standard 183.
❑ 5. Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup
*Exception(s):*
❑ Continuously operating zones
❑ 6. Outside-air source for ventilation; system capable of reducing OSA to required minimum
❑ 7. R-5 supply and return air duct insulation in unconditioned spaces
R-8 supply and return air duct insulation outside the building
R-8 insulation between ducts and the building exterior when ducts are part of a building assembly
*Exception(s):*
❑ Ducts located within equipment
❑ Ducts with interior and exterior temperature difference not exceeding 15°F.
❑ 8. Mechanical fasteners and sealants used to connect ducts and air distribution equipment
❑ 9. Ducts sealed - longitudinal seams on rigid ducts; transverse seams on all ducts; UL 181A or 181B tapes and mastics
❑ 10. Hot water pipe insulation: 1.5 in. for pipes <=1.5 in. and 2 in. for pipes >1.5 in.
Chilled water/refrigerant/brine pipe insulation: 1.5 in. for pipes <=1.5 in. and 1.5 in. for pipes >1.5 in.
Steam pipe insulation: 1.5 in. for pipes <=1.5 in. and 3 in. for pipes >1.5 in.



*Exception(s):*
❑ Piping within HVAC equipment.
❑ Fluid temperatures between 55 and 105°F.
❑ Fluid not heated or cooled with renewable energy.
❑ Piping within room fan-coil (with AHRI440 rating) and unit ventilators (with AHRI840 rating).
❑ Runouts <4 ft in length.
❑ 11. Operation and maintenance manual provided to building owner
❑ 12. Thermostatic controls have 5°F deadband
*Exception(s):*
❑ Thermostats requiring manual changeover between heating and cooling.
❑ Special occupancy or special applications where wide temperature ranges are not acceptable and are approved by the authority having jurisdiction.
❑ 13. Balancing devices provided in accordance with IMC 603.17
❑ 14. Demand control ventilation (DCV) present for high design occupancy areas (>40 person/1000 ft2 in spaces >500 ft2) and served by systems with any one of 1) an air-side economizer, 2) automatic modulating control of the outdoor air damper, or 3) a design outdoor airflow greater than 3000 cfm.
*Exception(s):*
❑ Systems with heat recovery.
❑ Multiple-zone systems without DDC of individual zones communicating with a central control panel.
❑ Systems with a design outdoor airflow less than 1200 cfm.
❑ Spaces where the supply airflow rate minus any makeup or outgoing transfer air requirement is less than 1200 cfm.
❑ 15. Motorized, automatic shutoff dampers required on exhaust and outdoor air supply openings
*Exception(s):*
❑ Gravity dampers acceptable in buildings <3 stories
❑ 16. Automatic controls for freeze protection systems present
❑ 17. Exhaust air heat recovery included for systems 5,000 cfm or greater with more than 70% outside air fraction or specifically exempted
*Exception(s):*
❑ Hazardous exhaust systems, commercial kitchen and clothes dryer exhaust systems that the International Mechanical Code prohibits the use of energy recovery systems.
❑ Systems serving spaces that are heated and not cooled to less than 60°F.
❑ Where more than 60 percent of the outdoor heating energy is provided from site-recovered or site solar energy.
❑ Heating systems in climates with less than 3600 HDD.
❑ Cooling systems in climates with a 1 percent cooling design wet-bulb temperature less than 64°F.
❑ Systems requiring dehumidification that employ energy recovery in series with the cooling coil.
❑ Laboratory fume hood exhaust systems that have either a variable air volume system capable of reducing exhaust and makeup air volume to 50 percent or less of design values or, a separate make up air supply meeting the following *makeup air requirements*: a) at least 75 percent of exhaust flow rate, b) heated to no more than 2°F below room setpoint temperature, c) cooled to no lower than 3°F above room setpoint temperature, d) no humidification added, e) no simultaneous heating and cooling.

## Section 5: 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 2009 IECC requirements in COM*check-Web* and to comply with the mandatory requirements in the Requirements Checklist.

| Amir Rophael - Mechanical Designer | Amir Rophael | 12/17/2024 |
|---|---|---|
| Name - Title | Signature | Date |

Digitally signed by Amir Rophael
DN: cn=Amir Rophael, o=Interplan LLC, ou=Mechanical Engineer, email=amir.rophael@interplan.com, c=US
Date: 2024.12.17 21:41:10 -05'00'

## Section 6: Post Construction Compliance Statement

❑ HVAC record drawings of the actual installation, system capacities, calibration information, and performance data for each equipment provided to the owner.
❑ HVAC O&M documents for all mechanical equipment and system provided to the owner by the mechanical contractor.
❑ Written HVAC balancing and operations report provided to the owner.

The above post construction requirements have been completed.

| | | |
|---|---|---|
| Principal Mechanical Designer-Name | Signature | Date |



**Chick-fil-A**
**5200 Buffington Road**
**Atlanta, Georgia**
**30349-2998**

INTERPLAN
INTERPLAN LLC

**ARCHITECTURE**
**ENGINEERING**
**PERMITTING**

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

**THIS DOCUMENT IS NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.**

CORPORATE SEAL:

STATE OF SOUTH CAROLINA
INTERPLAN, LLC
ORLANDO, FL
01060
REGISTERED ARCHITECT

SOUTH CAROLINA
INTERPLAN, LLC
No. C02393
CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
## BUSH RIVER ROAD
## NW CORNER OF COLONIAL LIFE BLVD W & BUSH RIVER RD
## COLUMBIA, SC 29210

# FSR#05714

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
PRINTED FOR
**PERMIT**

**REVISION SCHEDULE**

| NO. | DATE | DESCRIPTION |
|---|---|---|

CONSULTANT PROJECT # 2024.0344
DATE 12/20/24
DRAWN BY JR



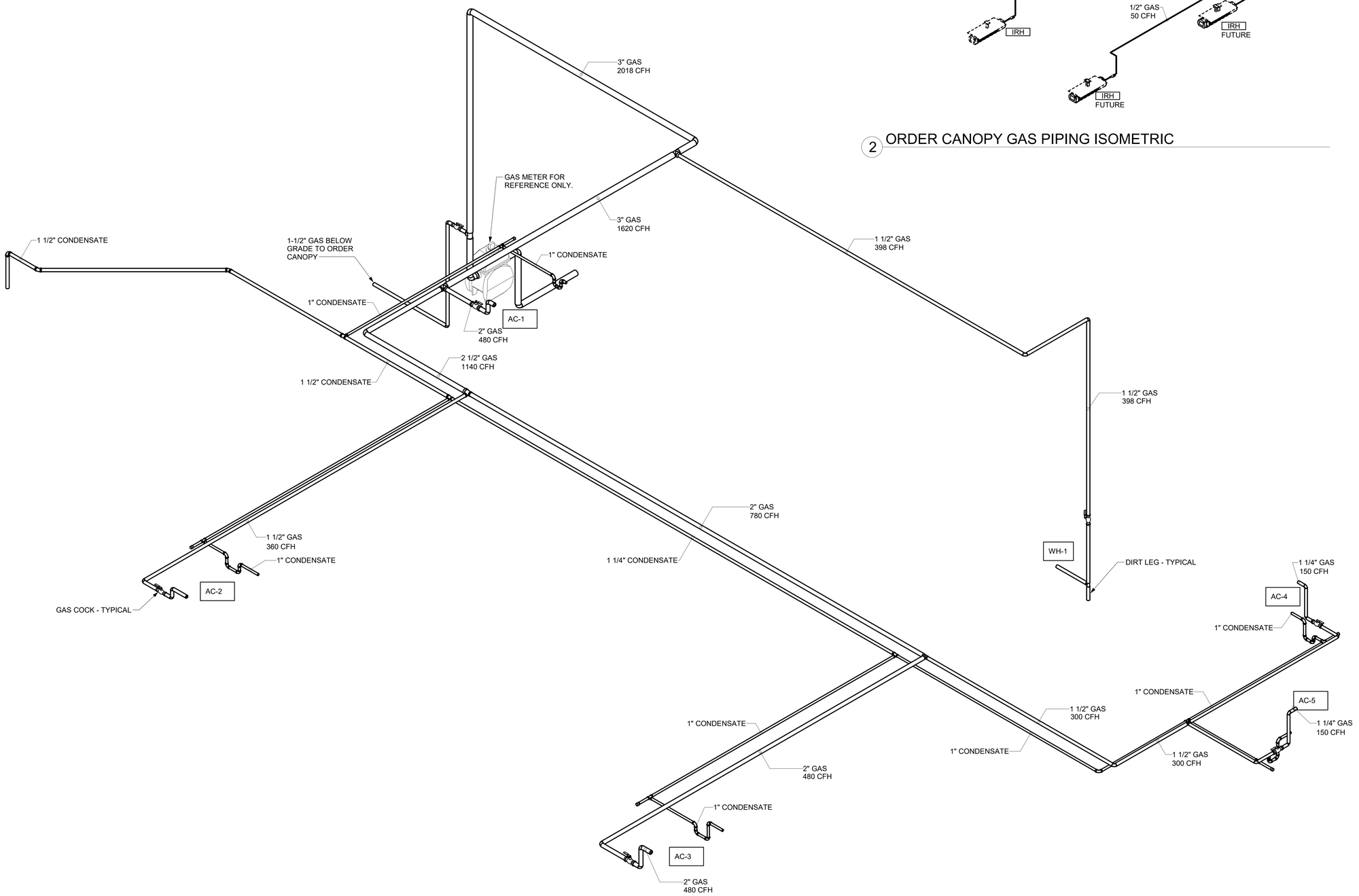
SHEET:
**MECHANICAL**
**COMCHECK**

SHEET NUMBER
**M-800**

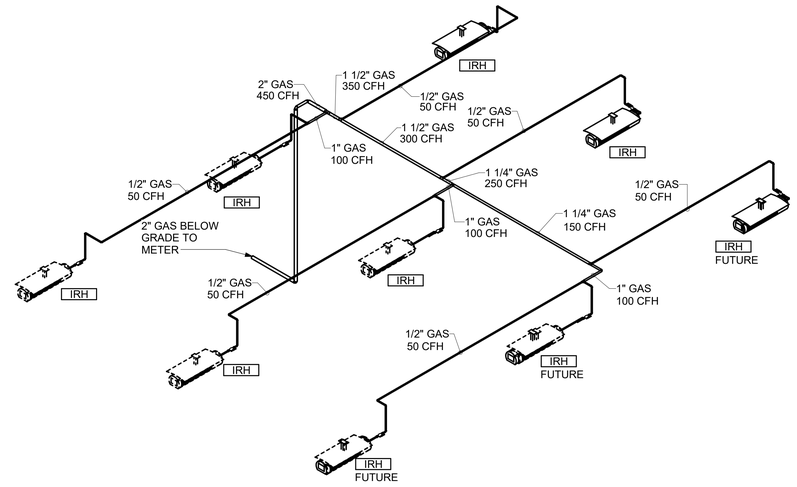
JONLOP - 12/20/2024 2:09:45 PM



12/20/2024 11:03:57 AM Autodesk Docs://SC_05714_Bush River Road_2024.8_REI/05714_Bush River Road_MEC.rvt
30-SE-05714-M-800-MECHANICAL COMCHECK




1 GAS AND CONDENSATE ISOMETRIC - LENNOX




2 ORDER CANOPY GAS PIPING ISOMETRIC


**Chick-fil-A**
**5200 Buffington Road**
**Atlanta, Georgia**
**30349-2998**

**INTERPLAN**
INTERPLAN LLC

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407.645.5008


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# CHICK-FIL-A
## BUSH RIVER ROAD
NW CORNER OF COLONIAL
LIFE BLVD W & BUSH RIVER RD
COLUMBIA, SC 29210

**FSR#05714**

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
PRINTED FOR
**BID**

**REVISION SCHEDULE**

| NO. | DATE | DESCRIPTION |
|---|---|---|

CONSULTANT PROJECT # 2024.0344
DATE 12/20/24
DRAWN BY JR



SHEET
**GAS AND CONDENSATE ISOMETRIC - LENNOX**

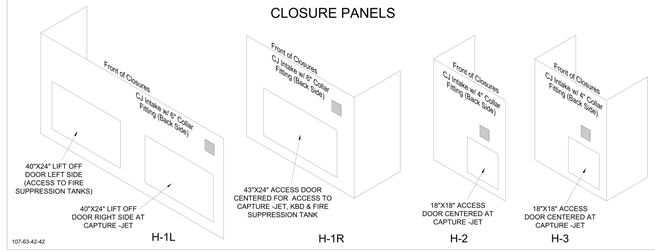
SHEET NUMBER
**M-901L**




1/27/2025 2:30:33 PM Autodesk Docs://SC_05714_Bush River Road_2024.8_REI/05714_Bush River Road_MEC.rvt
30-SE-05714-M-901L-GAS AND CONDENSATE ISOMETRIC - LENNOX

| | | EXHAUST COLLAR | | | EXHAUST AIR INFORMATION | | | CAPTURE AIR INFORMATION | | S.S. KSA FILTERS | | | CEILING CLOSURES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HOOD MODEL | HOOD NUMBER | QTY | LENGTH | WIDTH | CFM | TAB | SP | CFM | SP | FULL | HALF | LED LIGHTS | QTY | CLOSURE HEIGHT | CEILING HEIGHT | HOOD WEIGHT | KBD DAMPER | K FACTOR (CFM = K FACTOR * √DP) | MATERIAL |
| KVL-2-IC | H-1L | 1 | 14" | 8" | 1204 | 0.13" | 0.22" | 80 | 0.30" | 5 | - | 3 | 2 | TBD | ADVISE | 669 LBS | * | 3369 | ALL 18 GA 430 S.S. |
| KVL-2-IC | H-1R | 1 | 8" | 8" | 709 | 0.13" | 0.23" | 47 | 0.30" | 3 | - | 2 | 2 | | | 394 LBS | * | 1971 | |
| KVL-C-IC | H-2 | 1 | 8" | 8" | 701 | 0.30" | 0.39" | 30 | 0.29" | 2 | - | 1 | 1 | TBD | | 245 LBS | * | 1291 | |
| KVL-C-IC | H-3 | 1 | 8" | 8" | 701 | 0.30" | 0.39" | 30 | 0.29" | 2 | - | 1 | 3 | | | 245 LBS | * | 1291 | |

## CLOSURE PANELS

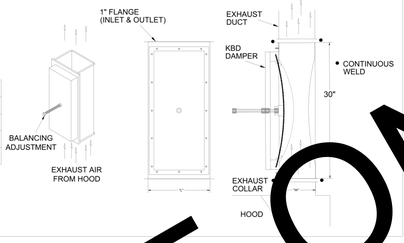



## MODEL:KBD
## CALIBRATED KBDs
KITCHEN BALANCING DAMPER

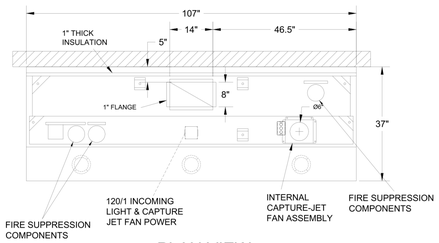
EXHAUST VOLUME DAMPER

| TAG | "L" | "W" | QUANTITY |
|---|---|---|---|
| H-1L | 14" | 8" | 1 |
| H-1R | 8" | 8" | 1 |
| H-2 | 8" | 8" | 1 |
| H-3 | 8" | 8" | 1 |

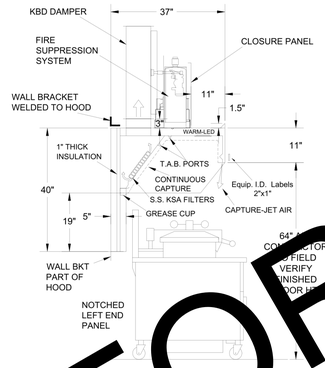
MATERIAL: FRAME - 16GA CONT. GALV. ADJUSTABLE PANEL 18GA S.S.




## H-1L



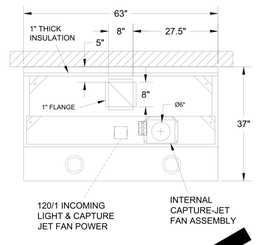

### PLAN VIEW



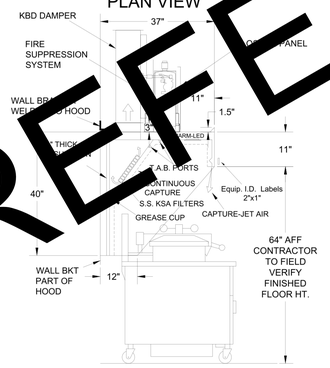

### H-1L SECTION VIEW

- CEILING CLOSURE RECESSED 11" FROM FRONT TO CREATE SHELF
- FRONT CLOSURE PANEL WITH 40"X24" LIFT OUT DOOR LEFT SIDE (ACCESS TO FIRE SUPPRESSION
- 40"X24" LIFT DOOR RIGHT SIDE AT CAPTURE-JET WITH FRONT CJ INTAKE
- CONTINUOUS CAPTURE INTERNAL RIGHT END CUTOUT
- 3" REAR STAND-OFF TO HAVE 1" THICK INSULATION
- NOTCHED LEFT END PANEL
- GREASE CUP RIGHT END
- AMEREX WEIGHT = 264 LBS

## H-1R



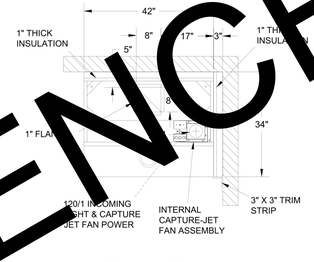

### PLAN VIEW



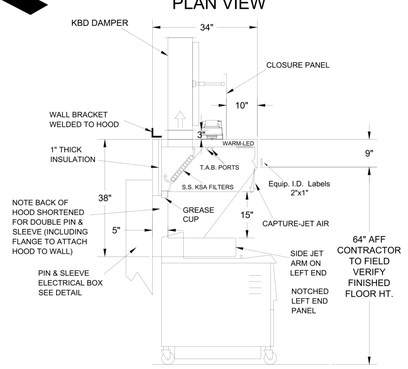

### H-1R SECTION VIEW

- CEILING CLOSURE RECESSED 11" FROM FRONT TO CREATE SHELF
- FRONT CLOSURE PANEL WITH 43"X24" ACCESS DOOR FOR ACCESS TO CAPTURE-JET AND FIRE SUPPRESSION
- CONTINUOUS CAPTURE INTERNAL LEFT END CUTOUT
- 3" REAR STAND-OFF TO HAVE 1" THICK INSULATION
- GREASE CUP RIGHT END

## H-2



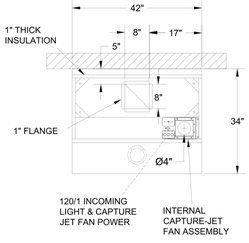

### PLAN VIEW



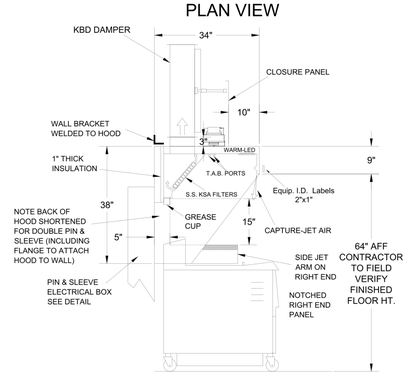

### H-2 SECTION VIEW

- CEILING CLOSURE RECESSED 10" FROM FRONT TO CREATE SHELF
- 18"X18" ACCESS DOOR CENTERED AT CAPTURE-JET WITH FRONT CJ INTAKE
- NOTCHED LEFT END PANEL
- DOUBLE RECEPTACLE PIN & SLEEVE
- 3"X3" TRIM STRIP FOR STANDOFF ON RIGHT END
- 3" SIDE & REAR STAND-OFF TO HAVE 1" THICK INSULATION
- GREASE CUP RIGHT END

## H-3




### PLAN VIEW




### H-3 SECTION VIEW

- CEILING CLOSURE RECESSED 10" FROM FRONT TO CREATE SHELF
- 18"X18" ACCESS DOOR CENTERED AT CAPTURE-JET WITH FRONT CJ INTAKE
- NOTCHED RIGHT END PANEL
- DOUBLE RECEPTACLE PIN & SLEEVE
- 3" REAR STAND-OFF TO HAVE 1" THICK INSULATION
- GREASE CUP RIGHT END



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1. ALL DIMENSIONAL INFORMATION, MOUNTING POSITIONS AND CLEARANCES
2. THE CORRECT VOLTAGE AND TYPE OF COOKING EQUIPMENT.

NOTE TO APPROVER
ANY CHANGES IN COOKING EQUIPMENT SUCH AS INCREASED ENERGY INPUTS OR EQUIPMENT POSITION MAY AFFECT EXHAUST AIRFLOW. HALTON MUST BE NOTIFIED IF ANY OF THESE CHANGES OCCUR. A RECALCULATION EXHAUST AIRFLOW MAY BE REQUIRED.

☐ REVISE AND RESUBMIT
APPROVED FOR FABRICATION
☐ WITH NO CHANGES ☐ WITH CHANGES AS NOTED
APPROVED BY DATE

MAIL APPROVED DRAWINGS TO APPROPRIATE FACTORY BELOW:
HALTON CO. (CANADA)
1021 BREVIK PLACE
MISSISSAUGA, ON L4W 3R7
1-905-624-0301

WEBSITE: www.halton.com
HALTON CO. (USA)
101 INDUSTRIAL DRIVE
SCOTTSVILLE, KY 42164
1-270-237-5600

| REV. | REVISION DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |

PROJECT:
CHICK-FIL-A #5714
BUSH RIVER RD.

LOCATION: COLUMBIA, SC
DRAWN BY: SKK
SCALE: NOT TO SCALE
DATE: 11.22.24

Halton

DRAWING No.:
U24-938-01

SHEET NO.: H-1.1

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

INTERPLAN
INTERPLAN LLC

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

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ORLANDO, FL
01060
REGISTERED ARCHITECT
SOUTH CAROLINA
INTERPLAN, LLC
No. C02393
CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
# BUSH RIVER ROAD
## NW CORNER OF COLONIAL LIFE BLVD W & BUSH RIVER RD
## COLUMBIA, SC 29210

**FSR#05714**

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
PRINTED FOR
**BID**

REVISION SCHEDULE

| NO. | DATE | DESCRIPTION |
|---|---|---|

CONSULTANT PROJECT # 2024.0344
DATE 12/20/24
DRAWN BY JR



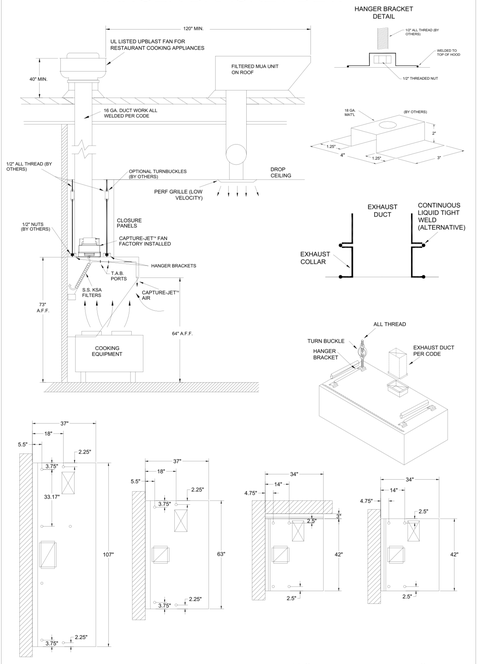
SHEET
**HALTON HOOD SHOP DRAWING**

SHEET NUMBER
**MH-1.1**

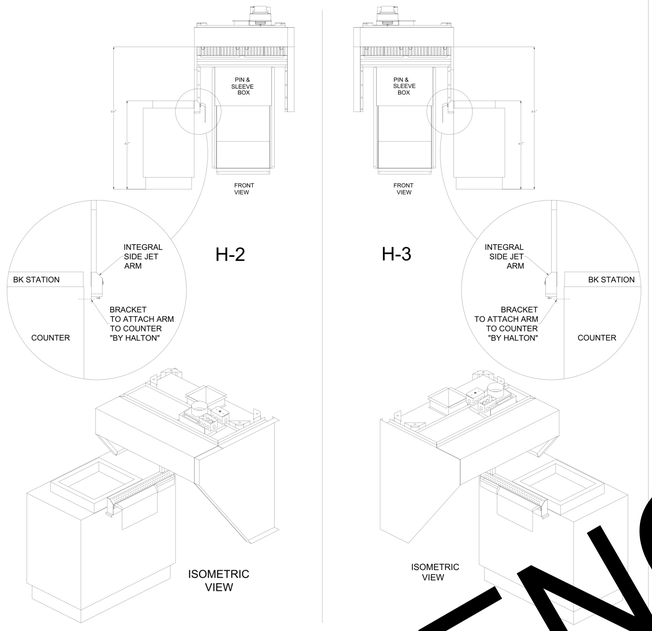


1/27/2025 2:30:35 PM Autodesk Docs://SC_05714_Bush River Road_2024.8_REI/05714_Bush River Road_MEC.rvt
30-SE-05714-MH-1.1-HALTON HOOD SHOP DRAWING

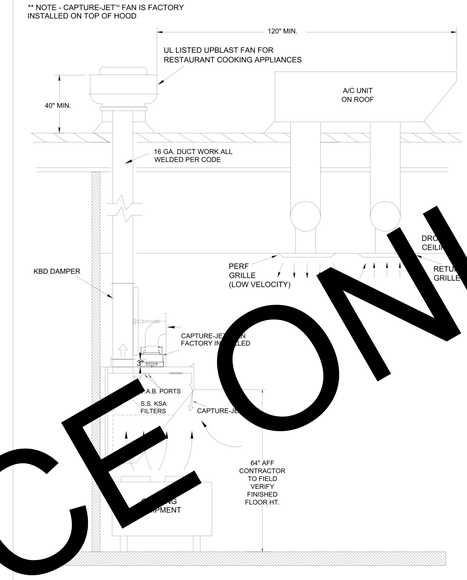
# HANGER BRACKET DETAIL




# INTEGRAL SIDE JET ARM




# TYPICAL INSTALLATION

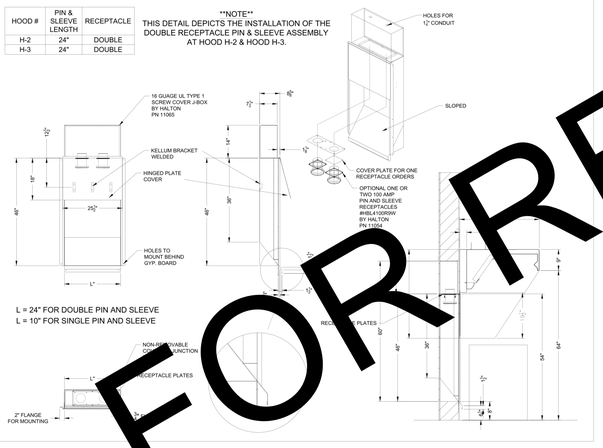



4105A

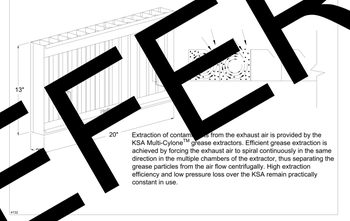
# PIN & SLEEVE BOX DETAIL

| HOOD # | PIN & SLEEVE LENGTH | RECEPTACLE |
|---|---|---|
| H-2 | 24" | DOUBLE |
| H-3 | 24" | DOUBLE |

**NOTE**
THIS DETAIL DEPICTS THE INSTALLATION OF THE DOUBLE RECEPTACLE PIN & SLEEVE ASSEMBLY AT HOOD H-2 & HOOD H-3.




# KSA Grease Extractor




Extraction of contaminants from the exhaust air is provided by the KSA Multi-Cyclone™ grease extractors. Efficient grease extraction is achieved by forcing the exhaust air to spiral continuously in the same direction in the multiple chambers of the extractor, thus separating the grease particles from the air flow centrifugally. High extraction efficiency and low pressure loss over the KSA remain practically constant in use.

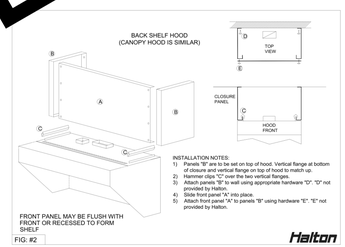
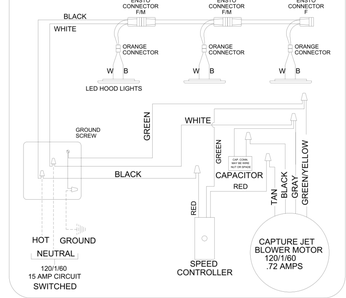


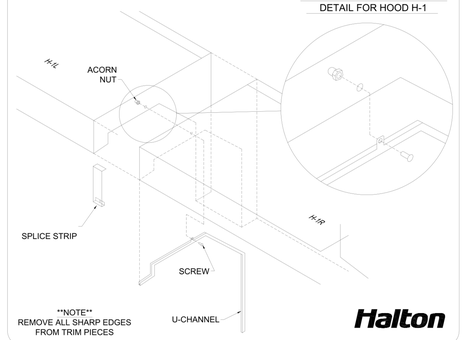

FIG. #2

# TYPICAL WIRING OF CAPTURE-JET FAN

BY HALTON
BY ELECTRICIAN




# SPLICE STRIP/U-CHANNEL DETAIL FOR HOOD H-1




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

CONFORMS TO UL STD UL STD 710 CERTIFIED TO ULC STD S646
INTERTEK 3012225

HALTON COMPANY, 101 INDUSTRIAL DR., SCOTTSVILLE, KY 42164

MODEL NO. KVL-C-IC | SERIAL NO. | ITEM NO.

GENERAL REQUIREMENTS

FILTER TYPE EXHAUST HOOD FOR COMMERCIAL AND INSTITUTIONAL KITCHENS
THE FAN CIRCUIT IS RATED FOR 120V, 15A, 60HZ.
THE LIGHTING CIRCUIT IS RATED FOR 120V, 15A, 60HZ.
THE HOOD HAS BEEN CERTIFIED BY ETL FOR 0 INCH CLEARANCE TO COMBUSTIBLE
MATERIALS (TOP, SIDES, FRONT AND REAR) IN COMPLIANCE WITH UL710 WITH CONSIDERATIONS TO NFPA 96.
THE HOOD IS PROVIDED WITH REPLACEABLE KSA FILTERS AND LIGHTING FIXTURES
REPLACE FILTERS ONLY WITH UL CLASSIFIED FILTER TYPE OF THE SAME MODEL AND MANUFACTURER.
SUITABLE FOR USE TO MEDIUM DUTY COOKING APPLIANCES.

| DUTY LEVEL | MINIMUM OVERHANG | | DISTANCE BETWEEN FRONT EDGE OF HOOD AND COOKING SURFACE, IN | | MIN. EXHAUST GRAFT OF HOOD LENGTH |
|---|---|---|---|---|---|
| | FRONT, IN | SIDE, IN | MIN | MAX | |
| MEDIUM | 0 | 0 | 21 | 31 | 138 |

JET SUPPLY AIR FLOW SHALL ONLY BE SET AT 0.30 IN H20

CONFORMS TO UL STD UL STD 710 CERTIFIED TO ULC STD S646
INTERTEK 3012225

HALTON COMPANY, 101 INDUSTRIAL DR., SCOTTSVILLE, KY 42164

MODEL NO. KVL-2-IC | SERIAL NO. | ITEM NO.

GENERAL REQUIREMENTS

FILTER TYPE EXHAUST HOOD FOR COMMERCIAL AND INSTITUTIONAL KITCHENS
THE FAN CIRCUIT IS RATED FOR 120V, 15A, 60HZ.
THE LIGHTING CIRCUIT IS RATED FOR 120V, 15A, 60HZ.
THE HOOD HAS BEEN CERTIFIED BY ETL FOR 0 INCH CLEARANCE TO COMBUSTIBLE
MATERIALS (TOP, SIDES, FRONT AND REAR) IN COMPLIANCE WITH UL710 WITH CONSIDERATIONS TO NFPA 96.
THE HOOD IS PROVIDED WITH REPLACEABLE KSA FILTERS AND LIGHTING FIXTURES.
REPLACE FILTERS ONLY WITH UL CLASSIFIED FILTER TYPE OF THE SAME MODEL AND MANUFACTURER.
SUITABLE FOR USE TO HEAVY DUTY COOKING APPLIANCES.

| DUTY LEVEL | MINIMUM OVERHANG | | DISTANCE BETWEEN FRONT EDGE OF HOOD AND COOKING SURFACE, IN | | MIN. EXHAUST GRAFT OF HOOD LENGTH |
|---|---|---|---|---|---|
| | FRONT, IN | SIDE, IN | MIN | MAX | |
| MEDIUM | 6 in | 0 | 20 | 30 | 121 |
| MEDIUM | 6 | 0 | 20 | 32 | 106 |
| MEDIUM | 6 | 0 | 20 | 36 | 133 |
| HEAVY | 0 | 2 | 20 | 25 | 191 |
| HEAVY | 0 | 2 | 20 | 30 | 216 |
| + - SETBACK/UNDERHANG DISTANCE | | | | | |

JET SUPPLY AIR FLOW SHALL ONLY BE SET AT 0.26 IN H20



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2. HEIGHT AND LENGTH TYPE OF COOKING EQUIPMENT.

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- REVISE AND RESUBMIT
- APPROVED FOR FABRICATION — WITH CHANGES AS NOTED
- WITH NO CHANGES

APPROVED BY | DATE

MAIL APPROVED DRAWINGS TO APPROPRIATE FACTORY BELOW:

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

WEBSITE: www.halton.com

HALTON CO. (USA)
101 INDUSTRIAL DRIVE
SCOTTSVILLE, KY 42164
1-270-237-5800

| REV. | REVISION DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |

PROJECT: CHICK-FIL-A #5714
BUSH RIVER RD.

LOCATION: COLUMBIA, SC
DRAWN BY: SKK
SCALE: NOT TO SCALE
DATE: 11.22.24

DRAWING No.: U24-938-02

SHEET NO.: H-1.2

Halton

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

INTERPLAN
INTERPLAN LLC

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

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INTERPLAN, LLC
ORLANDO, FL
01060
REGISTERED ARCHITECT

SOUTH CAROLINA
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No. C02393
CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
## BUSH RIVER ROAD
NW CORNER OF COLONIAL
LIFE BLVD W & BUSH RIVER RD
COLUMBIA, SC 29210

**FSR#05714**

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
PRINTED FOR
**BID**

**REVISION SCHEDULE**

| NO. | DATE | DESCRIPTION |
|---|---|---|

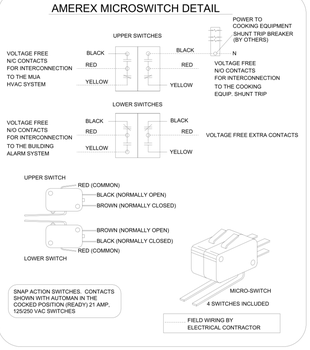
CONSULTANT PROJECT # 2024.0344
DATE 12/20/24
DRAWN BY JR



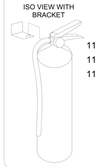
SHEET
**HALTON HOOD SHOP DRAWING**

SHEET NUMBER
**MH-1.2**

## AMEREX MICROSWITCH DETAIL




## FIRE EXTINGUISHER

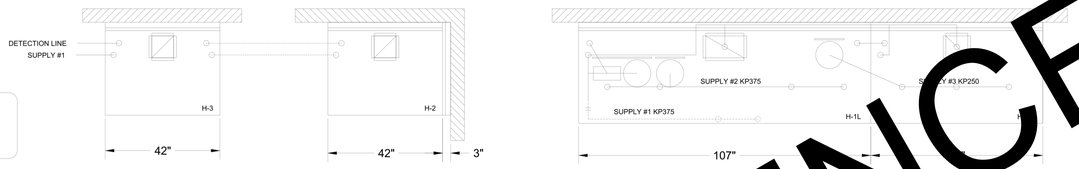



AMEREX

11238 5 LBS ABC MODEL B402 QTY_____
11239 10 LBS ABC MODEL B456 QTY_____
11240 6 LTR CLASS K MODEL C-260 QTY_____

SUPPLIED BY HALTON

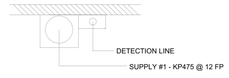
1/2" BLACK IRON SUPPLY LINE REQ'D FROM TANK TO FIRST BRANCH LINE FOR 475 TANKS ONLY!




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

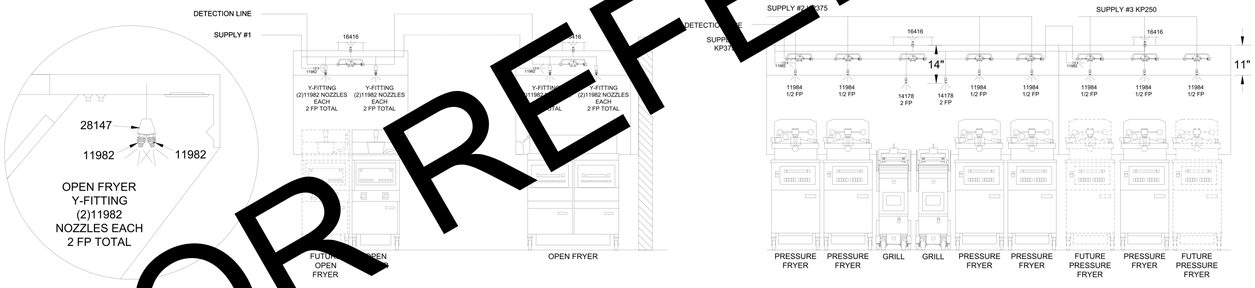
(1) SYSTEM ENCLOSURE
(1) MECHANICAL RELEASE MODULE
(2) EXTRA MICRO SWITCH ASSEMBLIES (MOUNTED IN MECHANICAL REL. MODULE)
(1) KP475 AGENT CYLINDERS (4.75 GALLON TANK)

| NOZZLE | ID | QTY | DESCRIPTION |
|---|---|---|---|
| 16416 | 0R-0G | 1 EA. | DUCT NOZZLE |
| 11982 | 2R-0G | 1 PER 10' | PLENUM NOZZLE |
| 11982 Y-FITTING | 2R-0G | 1 FITTING WITH 2 NOZZLES PER FP | ALL OPEN FRYERS |
| 11984 | 4R-0G | 1 PER FRYER | ALL PRESSURE FRYERS |
| 14178 | 0R-1G | 1 PER GRILL | GRILLS |

AMEREX FIRE SYSTEM
A) (2) KP375 TANKS & (1) KP250 TANK - 29 FLOW POINTS (MOUNTED ON HOOD H-1L FOR HOODS H-1L & H-1R)
B) 1/2" & 3/8" BLACK IRON PIPING WITH 3/8" S.S. APPLIANCE DROPS

(1) MECHANICAL RELEASE MODULE
(2) EXTRA MICRO SWITCH ASSEMBLIES (MOUNTED IN MECHANICAL REL. MODULE)
(2) 2.31 GALLON TANK
(1) 3.75 GALLON TANKS

PRESSURE FRYER AND GRILL NOZZLES WITH SWIVELS ONLY




AMEREX FIRE SYSTEM LAYOUT

AMEREX

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) KP250 TANK SYSTEM MOUNTED ON TOP OF (H-1L)
MAXIMUM FLOW POINTS = 29

AMEREX FIRE SYSTEM NOTES
(1) KP475 TANK SYSTEM REMOTE MOUNTED
MAXIMUM FLOW POINTS = 14

| AMEREX PART # | HALTON PART # | QTY | DESCRIPTION | FLOW PTS (TOTAL) |
|---|---|---|---|---|
| 16416 | 12148 | 4 | DUCT NOZZLES | 4 |
| 11982 | 12147 | 4 | PLENUM NOZZLES | 4 |
| 28147 Y-FITTING | 13384 | 4 | APPLIANCE NOZZLES | 8 |
| 14178 | 12149 | 2 | APPLIANCE NOZZLES | 4 |
| 11984 | 13387 | 7 | APPLIANCE NOZZLES | 3.5 |
| | | | TOTAL FLOW POINTS | 23.5 |
| ITEM | | QTY | DESCRIPTION | |
| 12508-P001 | 11897 | 10 | DETECTORS BRACKET ASSEMBLY | |
| 26948 | 13389 | 1 | KP250 AGENT CYLINDER | |
| 13334 | 11938 | 2 | KP375 AGENT CYLINDER | |
| 17379 | 11939 | 1 | KP475 AGENT CYLINDER | |
| 18001 | 11940 | 1 | MECHANICAL RELEASE MODULE WITH ENCLOSURE WITH DOUBLE POLE MICRO SWITCH | |
| 11977 | 12152 | 1 | MECHANICAL RELEASE MODULE WITHOUT ENCLOSURE WITH DOUBLE POLE MICRO SWITCH | |
| 21481 | 12155 | 2 | REMOTE MANUAL PULL STATION | |

AMEREX FIRE SYSTEM
UL LISTED PER STD LATEST STD 300
1. FINAL INSTALLATION IS TO BE MADE IN ACCORDANCE WITH ALL APPLICABLE CODES
2. ALL ELECTRICAL COMPONENTS FOR EQUIPMENT SHUT DOWN TO BE PROVIDED BY THE ELECTRICIAN. MICRO-SWITCH INSTALLED IN REGULATED RELEASE BY AMEREX INSTALLER
3. REMOTE PULL STATION LOCATED PER MECHANICAL DRAWINGS



THIS DRAWING MUST BE CHECKED, SIGNED AND RETURNED TO THE APPROPRIATE FACTORY. PLEASE VERIFY THE FOLLOWING:
1. ALL DIMENSIONAL INFORMATION, MOUNTING POSITIONS
2. THE LOCATION AND TYPE OF COOKING EQUIPMENT.

NOTE TO APPROVER
ANY CHANGES IN COOKING EQUIPMENT SUCH AS INCREASED ENERGY INPUTS OR EQUIPMENT POSITIONAL ADJUSTMENTS MUST BE REVIEWED AND APPROVED BY AMEREX. ANY OF THESE CHANGES OCCUR, A RECALCULATION EXHAUST AIRFLOW MAY BE REQUIRED.

REVISE AND RESUBMIT
APPROVED FOR FABRICATION WITH CHANGES AS NOTED
WITH NO CHANGES

APPROVED BY: DATE

MAIL APPROVED DRAWINGS TO APPROPRIATE FACTORY BELOW:

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

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

WEBSITE: www.halton.com

| REV. | REVISION DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |

PROJECT:
CHICK-FIL-A #5714
BUSH RIVER RD.

LOCATION: COLUMBIA, SC
DRAWN BY: SKK
SCALE: NOT TO SCALE
DATE: 11.22.24

Halton

DRAWING No.:
U24-938-03

SHEET NO.: H-1.3

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

INTERPLAN
INTERPLAN LLC

ARCHITECTURE
ENGINEERING
PERMITING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

THIS DOCUMENT IS NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.

CORPORATE SEAL:

STATE OF SOUTH CAROLINA
INTERPLAN, LLC
ORLANDO, FL
01060
REGISTERED ARCHITECT

SOUTH CAROLINA
INTERPLAN, LLC
No. C02393
CERTIFICATE OF AUTHORIZATION

# CHICK-FIL-A
# BUSH RIVER ROAD
NW CORNER OF COLONIAL
LIFE BLVD W & BUSH RIVER RD
COLUMBIA, SC 29210

FSR#05714

BUILDING TYPE / SIZE: P14 SE XP
RELEASE: 24.08
PRINTED FOR
**BID**

**REVISION SCHEDULE**

| NO. | DATE | DESCRIPTION |
|---|---|---|

CONSULTANT PROJECT # 2024.0344
DATE 12/20/24
DRAWN BY JR



SHEET
**HALTON HOOD SHOP DRAWING**

SHEET NUMBER
**MH-1.3**



1/27/2025 2:30:39 PM Autodesk Docs://SC_05714_Bush River Road_2024.8_REI/05714_Bush River Road_MEC.rvt
30-SE-05714-MH-1.3-HALTON HOOD SHOP DRAWING