HVAC GENERAL NOTES:

1. ALL MECHANICAL WORK SHALL CONFORM TO ALL LOCAL, STATE AND BUILDING CODES, ALL GOVERNMENT CODES, NFPA, ASME AND ASHRAE STANDARDS.
2. ALL EQUIPMENT LOADING AND METHODS OF SUPPORT SHALL BE REVIEWED BY THE OWNER'S STRUCTURAL ENGINEER. COORDINATE WITH OWNER.
3. DUCT PENETRATIONS SHALL CONFORM TO THE FIRE RATINGS OF EACH SPECIFIC PARTITION TYPE. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS.
4. CONTRACTOR MUST COORDINATE WITH OWNER TO DETERMINE THE EXTENT OF OVERTIME HOURS.
5. CONTRACTOR SHALL PRESSURE TEST ALL PIPING IN ACCORDANCE WITH SPECIFICATIONS. TESTING SHALL BE DONE IN THE PRESENCE OF OWNER.
6. CONTRACTOR SHALL INCLUDE PROVISIONS FOR TEMPORARY PIPING AS REQUIRED TO MAINTAIN SERVICE TO OTHER SPACES.
7. PROVIDE 1 SET OF AS-BUILTS AND 2 COPIES OF THE CERTIFIED TESTING AND BALANCING REPORT TO THE LANDLORD UPON COMPLETION OF THE PROJECT.
8. ALL WORK GENERATING OBJECTIONABLE NOISE SHALL BE COORDINATED WITH LANDLORD.
9. HVAC EQUIPMENT SHALL BE ARRANGED TO MINIMIZE VIBRATION AND NOISE PROPAGATION.
10. ALL WORK AFFECTING EXISTING BUILDING SYSTEMS SHALL BE COORDINATED WITH THE BUILDING INCLUDING ALL SHUT-DOWNS.
11. CONTRACTOR TO COORDINATE ALL WORK WITH BUILDING MANAGEMENT AND BUILDING ENGINEERS. ALL WORK AFFECTING EXISTING SYSTEMS SHALL BE COORDINATED WITH BUILDING MANAGEMENT INCLUDING ALL SHUTDOWNS. COORDINATE ALL WORK WITH THE OTHER TRADES.
12. ALL EXISTING EQUIPMENT TO REMAIN SHALL BE CLEANED, REFURBISHED AND TESTED. REPLACE PARTS AS REQUIRED TO OBTAIN OPTIMAL PERFORMANCE. REPORT FINDINGS TO ENGINEER PRIOR TO COMMENCEMENT OF WORK.
13. CONTRACTOR SHALL PROVIDE AIR BALANCING UPON COMPLETION OF WORK. CONTRACTOR SHALL PROVIDE BALANCE REPORT TO ENGINEER.
14. ALL ATC WIRING SHALL BE PROVIDED IN EMT WITHIN MECHANICAL ROOMS AND UTILITY ROOMS (I.E. ELEVATOR MACHINE ROOMS, ELECTRICAL ROOMS, ETC.). PLENUM RATED CABLING ELSEWHERE. ALL OUTDOOR ATC WIRING SHALL BE PROVIDED WITHIN RIGID METAL CONDUIT.
15. ALL ATC PANELS AND HVAC CONTROL PANELS SHALL BE CAPABLE OF BEING INTERLOCKED WITH THE TENANT'S BMS SYSTEM AS REQUIRED TO MONITOR THE SYSTEM(S) AND CONTROL THE SYSTEM(S) PER THE SEQUENCE OF OPERATIONS.
16. COORDINATE ALL HVAC EQUIPMENT WITH OTHER TRADES (I.E. PLUMBING, SPRINKLER, ELECTICAL POWER AND LIGHTING, ARCHITECTURAL, ETC.) PROVIDE COORDINATED SHOP DRAWINGS INDICATING ALL OF THE MANUFACTURER'S RECOMMENDED CLEARANCES UNOBSTRUCTED FOR REVIEW PRIOR TO INSTALLATION.
17. CONTRACTOR TO PROVIDE UL LISTED FIRE STOPPING SYSTEM FOR ALL THROUGH PENETRATIONS INCLUDING BUT NOT LIMITED TO DUCTWORK, PIPING, HANGERS, CONDUIT, ETC.
18. MANUFACTURERS SYSTEM MUST BE PART OF A UL RATED SYSTEM. LOCATIONS AND TYPES OF FIRESTOPPING SYSTEM INSTALLATIONS SHALL BE COORDINATED WITH ARCHITECTURAL AND LIFE SAFETY PLANS TO DETERMINE SCOPE.
19. CONTRACTOR TO PROVIDE ENGINEER WITH ASSOCIATED MANUFACTURER'S UL DETAIL OF ALL APPLICABLE PENETRATIONS FOR APPROVAL.
20. FIRE STOPPING SYSTEMS MANUFACTURERS SHALL BE HILTI, 3M, STI, OR APPROVED EQUAL.
21. CONTRACTOR TO COORDINATE FIRE STOPPING INSTALLATION WITH PROJECT SPECIAL INSPECTOR PRIOR TO INSTALLATION. FIRESTOPPING INSTALLATION INSPECTION SHALL BE PROVIDED BY SPECIAL INSPECTOR. ALL APPLICABLE FIRESTOPPING SYSTEM UL DETAILS SHALL BE AVAILABLE FOR SPECIAL INSPECTOR REVIEW.

ABBREVIATIONS:

ABBREV.	DESCRIPTION
AC	AIR CONDITIONING
AD	ACCESS DOOR
A.F.F.	ABOVE FINISHED FLOOR
BDD	BACKDRAFT DAMPER
BHP	BRAKE HORSE POWER
BOD	BOTTOM OF DUCT
BTU	BRITISH THERMAL UNIT
CAV	CONSTANT AIR VOLUME
CD	CEILING DIFFUSER AND/OR CONDENSATE DRAIN
COD	CABLE OPERATED DAMPER
CP	CONDENSATE PUMP
CU	CONDENSING UNIT
CR	CEILING RETURN
DN	DOWN
DP	DRIP PAN
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
FC	FLEXIBLE CONNECTION
FCU	FAN COIL UNIT
FD/AD	FIRE DAMPER WITH ACCESS DOOR
FLA	FULL LOAD AMPS
FSD	FIRE SMOKE DAMPER
HP	HORSEPOWER
KW	KILOWATT
KWH	KILOWATT HOURS
LAT	LEAVING AIR TEMPERATURE
LD	LINEAR DIFFUSER (CEILING, WALL, SILL, OR FLOOR) AND/OR LEAK DETECTOR
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSAND BTU PER HOUR
MD	MOTORIZED DAMPER
N.I.C	NOT IN THIS CONTRACT
N.T.S.	NOT TO SCALE
OA	OUTSIDE AIR
OAF	OUTSIDE AIR FAN
PSIG	POUNDS PER SQUARE INCH (GAUGE)
RG	RETURN GRILLE
RPM	REVOLUTIONS PER MINUTE
SD	SMOKE DETECTOR
SG	SUPPLY GRILLE
SS	STAINLESS STEEL
TD	TRANSFER DUCT
TX	TOILET EXHAUST
VD	VOLUME DAMPER
V.I.F.	VERIFY IN FIELD
WMS	WIRE MESH SCREEN

SYMBOL LIST:

SYMBOL	DESCRIPTION
PATTERN DEFLECTOR; CD-A (220)	SUPPLY DIFFUSER (FOR SIZE, TYPE, ETC. SEE AIR OUTLET SCHEDULE); DIFFUSER TAG (SEE AIR OUTLET SCHEDULE); INDICATES C.F.M.
CD-A (220)	SUPPLY DIFFUSER (FOR SIZE, TYPE, ETC. SEE AIR OUTLET SCHEDULE); DIFFUSER TAG (SEE AIR OUTLET SCHEDULE); INDICATES C.F.M.
CR-A	RETURN REGISTER (FOR SIZE, TYPE, ETC. SEE AIR OUTLET SCHEDULE)
	TRANSFER OPENING ABOVE HUNG CEILING
XX-X (XXX)	TRANSFER AIR GRILLE
U	DOOR UNDERCUT
18 x 12; 18 x 12	DUCTWORK (SEE SPECIFICATIONS); CLEAR INSIDE DIMENSIONS (FIRST NUMBER INDICATES PLAN SIZE)
SG-A (220)	SUPPLY GRILLE (FOR SIZE, TYPE, ETC. SEE AIR OUTLET SCHEDULE); DIFFUSER TAG (SEE AIR OUTLET SCHEDULE); INDICATES C.F.M.
FC; FC	DUCT FLEXIBLE CONNECTION
	DUCTWORK WITH ACOUSTICAL LINING (DUCT SIZE NOTED INDICATES CLEAR INSIDE DIMENSION)
	ACOUSTICALLY LINED TRANSFER AIR DUCT WITH 1" A.L. & WMS
AD	ACCESS DOOR IN DUCT
FSD/AD; FD/AD	COMBINATION FIRE AND SMOKE DAMPER (FSD) WITH ACCESS DOOR & SMOKE DETECTOR/FIRE DAMPER (FD) WITH ACCESS DOOR
VD; VD	DUCT VOLUME DAMPER
COD; COD	CABLE OPERATED DAMPER TO BE USED FOR ALL SUPPLY AND RETURN DIFFUSERS IN SHEETROCK OR IN ACCESSIBLE CEILINGS.
FD/AD; FD/AD	FUSIBLE LINK FIRE DAMPER WITH DUCT ACCESS DOOR (SD INDICATES SMOKE TYPE DAMPER, FSD INDICATES FIRE/SMOKE TYPE DAMPER. SEE SPECIFICATIONS)
FD/AD; FD/AD	FIRE SMOKE DAMPER WITH ACCESS DOOR
	BRANCH TAKEOFF
R	DUCT RISE CONNECTIONS
DN	DUCT DROP CONNECTIONS
	SUPPLY DUCTWORK UP
	RETURN DUCTWORK DOWN
T	NEW THERMOSTAT
T_S	TEMPERATURE SENSOR
SD	DUCT TYPE SMOKE DETECTOR
M	MOTORIZED DAMPER
	CONTROL WIRING
	DIRECTION OF AIRFLOW
	SERVICE CLEARANCE

PIPING SYMBOL LIST

SYMBOL	DESCRIPTION
	MANUALLY OPERATED SHUTOFF VALVE
	CHECK VALVE
	AUTOMATIC MODULATING THREE-WAY CONTROL VALVE
	AUTOMATIC TWO-WAY SHUTOFF VALVE
	PRESSURE GAUGE
	FUTURE VALVED AND CAPPED CONNECTION
	Y-STRAINER W/ BLOWOFF VALVE
	THERMOMETER
CP-#	CONDENSATE PUMP
LD	LEAK DETECTOR
	PIPING DROP
	PIPING RISE
	OUTDOOR PIPE SUPPORTS / GUIDES
	UNIONS
	PIPE TEE
	PIPE GUIDE

DRAWING LIST:

NUMBER	DESCRIPTION
M-100	H.V.A.C. TITLE SHEET
M-101	H.V.A.C. SPECIFICATIONS SHEET 1 OF 2
M-102	H.V.A.C. SPECIFICATIONS SHEET 2 OF 2
M-103	H.V.A.C. ENERGY CODE COMPLIANCE FORMS
M-104	H.V.A.C. ENERGY CODE COMPLIANCE FORMS
M-300	H.V.A.C. GROUND FLOOR PLANS
M-301	H.V.A.C. ROOF PLAN
M-600	H.V.A.C. SCHEDULES
M-700	H.V.A.C. DETAILS SHEET 1 OF 2
M-701	H.V.A.C. DETAILS SHEET 2 OF 2

DRAWING NOTATIONS:

SYMBOL	DESCRIPTION
1	SEE REFERENCE NOTE APPLICABLE TO THIS DRAWING. NOTE NUMBER INDICATED BY NUMERAL IN DIAMOND.
A; M-401	DETAIL REFERENCE TAG; INDICATES DETAIL NUMBER; INDICATES DRAWING NUMBER
3; M-401	ELEVATION REFERENCE TAG; INDICATES DETAIL NUMBER; INDICATES DRAWING NUMBER
	POINT OF CONNECTION TO EXISTING
	POINT OF DISCONNECTION
	CUT AND CAP

sg

sweetgreen®

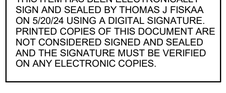
3101 W. EXPOSITION BLVD.
LOS ANGELES, CALIFORNIA 90018

THESE DRAWINGS & SPECIFICATIONS ARE CONFIDENTIAL AND SHALL REMAIN THE SOLE PROPERTY OF SWEETGREEN CORPORATION. THEY SHALL NOT BE REPRODUCED (IN WHOLE OR IN PART), SHARED WITH THIRD PARTIES OR USED IN ANY MANNER ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF SWEETGREEN CORPORATION. THESE DRAWINGS & SPECIFICATIONS ARE INTENDED TO EXPRESS DESIGN INTENT FOR A PROTOTYPICAL SWEETGREEN STORE (WHICH IS SUBJECT TO CHANGE AT ANY TIME) AND MAY NOT REFLECT ACTUAL SITE CONDITIONS. NEITHER PARTY SHALL HAVE ANY OBLIGATION NOR LIABILITY TO THE OTHER (EXCEPT AS STATED ABOVE) UNTIL A WRITTEN AGREEMENT IS FULLY EXECUTED.

ARCHITECT OF RECORD:

O'NEIL LANGAN
ARCHITECTS
15 WEST 37TH STREET
15TH FLOOR
NEW YORK, NY 10018
PHONE: 212-279-2670
FAX: 212-279-2671

STAMP:



05.20.2024

THIS ITEM HAS BEEN ELECTRONICALLY SIGN AND SEALED BY THOMAS J FISKAA ON 5/20/24 USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT INFORMATION:
EDGE DISTRICT

PROJECT INFORMATION:
1114 CENTRAL AVENUE
ST PETERSBURG, FL 33705

DRAWN BY:	DL
CHECKED BY:	PP
PROJECT MANAGER:	DL
SG DESIGN MANAGER:	-
SG CONSTR. MANAGER:	-
PROJECT NO:	21.091.00
TEMPLATE VERSION:	06.01.2020

REVISIONS

REV.	DATE	DESCRIPTION
	12.17.2021	PERMIT SET
1	06.03.2022	REV 02
2	06.24.2022	REV 03
6	05.20.2024	PERMIT REV2

H.V.A.C. TITLE SHEET

M-100

5/22/2024 8:57:16 AM

H.V.A.C. SPECIFICATIONS:

1. GENERAL

A. THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION," AIA DOCUMENT A201, LATEST EDITION, AND THESE SPECIFICATIONS AS APPLICABLE ARE PART OF THIS CONTRACT.

B. ALL APPLICABLE CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR WHO SHALL INFORM THE OWNER, PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIALS WHICH VIOLATE ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED BY THE CONTRACTOR.

C. INVESTIGATE EACH SPACE THROUGH WHICH EQUIPMENT MUST BE MOVED. WHERE NECESSARY, EQUIPMENT SHALL BE SHIPPED FROM MANUFACTURER IN SECTIONS OF SIZE SUITABLE FOR MOVING THROUGH AVAILABLE RESTRICTIVE SPACES. ASCERTAIN FROM BUILDING OWNER AT WHAT TIMES OF DAY EQUIPMENT MAY BE MOVED THROUGH ALL AREAS.

D. DUCTWORK AND PIPING IS SHOWN DIAGRAMMATICALLY AND DOES NOT SHOW ALL OFFSETS, DROPS AND RISES OF RUNS. THE CONTRACTOR SHALL ALLOW IN HIS PRICE FOR ROUTING OF DUCTWORK AND PIPING TO AVOID OBSTRUCTIONS. EXACT LOCATIONS ARE SUBJECT TO APPROVAL OF ARCHITECT. COORDINATION WITH THE EXISTING SERVICES, INCLUDING THOSE OF OTHER TRADES IS REQUIRED.

E. SUPPORT ALL DUCTWORK AND PIPING FROM BUILDING STRUCTURE AND/OR FRAMING IN AN APPROVED MANNER. WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING OR SUPPORTS FOR EQUIPMENT, FURNISH ADDITIONAL FRAMING. INSERTS SHALL BE STEEL, SLOTTED TYPE AND FACTORY PAINTED. SINGLE ROD SHALL BE SIMILAR TO GRINNELL FIG. 281. MULTI-ROD SHALL BE SIMILAR TO FEE & MASON SERIES 9000 WITH END CAPS AND CLOSURE STRIPS. MAXIMUM LOADING INCLUDING PIPES, DUCTWORK CONTENTS AND COVERING SHALL NOT EXCEED 75% OF RATED INSERT CAPABILITY. WHEN SUPPORTING FROM BUILDING USE BEAM CLAMPS IN APPROVED MANNER.

F. INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL.

G. REMOVAL AND RELOCATION OF CERTAIN EXISTING WORK WILL BE NECESSARY FOR THE PERFORMANCE OF THE GENERAL WORK. ALL EXISTING CONDITIONS CANNOT BE COMPLETELY DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL SURVEY THE SITE AND INCLUDE ALL CHANGES IN MAKING UP THE WORK PROPOSAL.

H. PLAN INSTALLATION OF NEW WORK AND CONNECTIONS TO EXISTING WORK TO ENSURE MINIMUM INTERFERENCE WITH REGULAR OPERATION OF EXISTING FACILITIES. ALL SYSTEM SHUTDOWNS AFFECTING OTHER AREAS SHALL BE COORDINATED WITH BUILDING OWNER. INSTALL ISOLATION VALVES AT POINT OF CONNECTION TO EXISTING PIPING. PROVIDE TEMPORARY DUCT CAPS AND/OR CONNECTIONS TO MINIMIZE SHUTDOWN TIME.

I. CONNECT NEW WORK TO EXISTING WORK IN NEAT AND APPROVED MANNER. RESTORE EXISTING WORK DISTURBED WHILE INSTALLING NEW WORK TO ACCEPTABLE CONDITION AS DETERMINED BY ARCHITECT.

J. DISCONNECT, REMOVE AND/OR RELOCATE EXISTING MATERIAL, EQUIPMENT AND OTHER WORK AS NOTED OR REQUIRED FOR PROPER INSTALLATION OF NEW SYSTEM.

K. THE CONTRACTOR SHALL KEEP ALL EQUIPMENT AND MATERIALS, AND ALL PARTS OF THE BUILDING, EXTERIOR SPACES AND ADJACENT STREETS, SIDEWALKS AND PAVEMENTS, FREE FROM MATERIAL AND DEBRIS RESULTING FROM THE EXECUTION OF THIS WORK. EXCESS MATERIALS WILL NOT BE PERMITTED TO ACCUMULATE EITHER ON THE INTERIOR OR THE EXTERIOR.

L. SEAL OPENINGS AROUND DUCTS AND PIPING THROUGH PARTITIONS, WALLS AND FLOORS (NOT IN SHAFTS) WITH MINERAL WOOL OR OTHER NONCOMBUSTIBLE MATERIAL.

M. PROVIDE ALL NECESSARY FLASHING AND COUNTERFLASHING TO MAINTAIN THE WATERPROOFING INTEGRITY OF THIS BUILDING AS REQUIRED BY THE INSTALLATION OR REMOVAL OF PIPES, DUCTS, LOUVERS, CONDUIT, AND EQUIPMENT. PROVIDE EQUIPMENT CURBS AND DUNNAGE STEEL AS REQUIRED.

N. ALL PRESENT MATERIAL, EQUIPMENT AND CONSTRUCTION DEBRIS TO BE REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR WITH THE EXCEPTION OF SPECIFIC EQUIPMENT AND APPARATUS REQUESTED BY THE BUILDING REPRESENTATIVE, ARCHITECT OR AS NOTED TO BE RELOCATED ON THE DRAWINGS SHALL BE PROPERLY DISPOSED OF BY THIS CONTRACTOR.

O. MATERIALS AND WORKMANSHIP, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.

P. THE WORK IN THE BUILDING SHALL BE DONE WHEN AND AS DIRECTED, AND IN A MANNER SATISFACTORY TO THE OWNER. THE WORK SHALL BE PERFORMED SO AS TO CAUSE THE LEAST POSSIBLE INCONVENIENCE AND DISTURBANCE TO THE PRESENT OCCUPANTS.

Q. THE CONTRACTOR'S PROPOSAL FOR ALL WORK SHALL BE PREDICATED ON THE PERFORMANCE OF THE WORK DURING REGULAR WORKING HOURS. WHEN SO DIRECTED, HOWEVER, THE CONTRACTOR SHALL INSTALL WORK IN OVERTIME AND THE ADDITIONAL COST TO BE CHARGED THEREFORE SHALL BE ONLY THE "PREMIUM" PORTION OF THE WAGES PAID.

R. UNLESS OTHERWISE SPECIFICALLY SPECIFIED, INCLUDE ALL CUTTING AND PATCHING OF EXISTING FLOORS, WALLS, PARTITIONS AND OTHER MATERIALS IN THE EXISTING BUILDING. THE CONTRACTOR SHALL RESTORE THESE AREAS TO ORIGINAL CONDITION.

S. REMOVABLE ACCESS TILE AND/OR ACCESS DOOR ARE REQUIRED IN HUNG CEILINGS, SHAFTS AND WALLS FOR ALL VOLUME AND FIRE DAMPERS, AUTOMATIC DAMPERS AND ALL OTHER MECHANICAL EQUIPMENT AND DEVICES. HVAC CONTRACTOR TO FURNISH ACCESS LOCATION AND REQUIREMENTS TO GENERAL CONTRACTOR. ACCESS TILE IDENTIFICATION: PROVIDE BUTTONS, TABS, AND MARKERS TO IDENTIFY LOCATION OF CONCEALED VALVES, DAMPERS AND EQUIPMENT.

T. ALL EQUIPMENT SHALL HAVE AN MEA AND/OR BSA NUMBER. THIS INFORMATION MUST BE INCLUDED IN THE SUBMITTAL PACKAGE.

U. ALL MATERIAL AND EQUIPMENT TO BE NEW UNLESS OTHERWISE NOTED AND SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.

V. SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF THE EXISTING BUILDING, EQUIPMENT, ETC., WHICH AFFECT THIS WORK, AND THE ACCESS TO SUCH SPACES, HAS BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. LATER CLAIMS SHALL NOT BE MADE FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH AN EXAMINATION. THE ON-SITE INSPECTION SHALL VERIFY EXISTING DUCTWORK, PIPING (SIZES, CLEARANCES, ETC) AND CONDITIONS.

W. INSURANCE: IN ACCORDANCE WITH BUILDING REQUIREMENTS AND SHALL INCLUDE A HOLD HARMLESS CLAUSE FOR OWNER AND ENGINEER.

X. THE FINAL ACCEPTANCE WILL BE MADE AFTER THE CONTRACTOR HAS ADJUSTED HIS EQUIPMENT, BALANCED THE VARIOUS SYSTEMS, DEMONSTRATED THAT IT FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL THE REQUIRED CERTIFICATES OF INSPECTION AND APPROVAL.

Y. SPECIFICATIONS ARE OF SIMPLIFIED FORM AND INCLUDE INCOMPLETE SENTENCES. WORDS OR PHRASES SUCH AS "THE CONTRACTOR SHALL," "SHALL BE," "FURNISH," "PROVIDE," "A," "THE," AND "ALL" HAVE BEEN OMITTED FOR BREVITY.

Z. SUBSTITUTIONS ON EQUIPMENT WILL ONLY BE CONSIDERED BY THE ENGINEER OF RECORD (EOR) IF THE REQUEST IS PUT FORTH BY THE CONTRACTOR(S) IN A TIMELY MANNER (2 WEEKS PRIOR TO SUBMISSION OF BID). THE CONTRACTOR(S) SHALL REVIEW THE DOCUMENTS TO UNDERSTAND THE SCOPE OF THE EQUIPMENT FOR WHICH A SUBSTITUTION IS REQUESTED AND PROVIDE A SHOP DRAWING FROM THE ALTERNATE MANUFACTURER LISTED HEREIN FOR A FORMAL REVIEW BY THE EOR. ANY BREACH OF THE TERMS LISTED IN THIS SECTION WILL AUTOMATICALLY DISQUALIFY THE REQUEST FOR SUBSTITUTION.

Z. DEFINITIONS:

1) "PROVIDE": TO SUPPLY, INSTALL AND CONNECT UP COMPLETE AND READY FOR SAFE AND REGULAR OPERATION THE PARTICULAR WORK REFERRED TO UNLESS SPECIFICALLY OTHERWISE NOTED.

2) "INSTALL": TO ERECT, MOUNT AND CONNECT COMPLETE WITH RELATED ACCESSORIES.

3) "FURNISH" OR "SUPPLY": TO PURCHASE, PROCURE, ACQUIRE AND DELIVER COMPLETE WITH RELATED ACCESSORIES.

4) "WORK": LABOR, MATERIALS, EQUIPMENT, APPARATUS, CONTROLS, ACCESSORIES AND OTHER ITEMS REQUIRED FOR PROPER AND COMPLETE INSTALLATION.

5) "CONCEALED": EMBEDDED IN MASONRY OR OTHER CONSTRUCTION, INSTALLED IN FURRED SPACES, WITHIN DOUBLE PARTITIONS OR HUNG CEILINGS, IN TRENCHES, IN CRAWL SPACES, OR IN ENCLOSURES.

6) "EXPOSED": NOT INSTALLED UNDERGROUND OR "CONCEALED" AS DEFINED ABOVE.

7) "SIMILAR" OR "EQUAL": EQUAL IN MATERIALS, WEIGHT, SIZE, DESIGN AND EFFICIENCY OF SPECIFIED PRODUCT.

8) "BMS": BUILDING MANAGEMENT SYSTEM THAT CONTROLS THE ENTIRE HVAC SYSTEM AND ALL RELATED EQUIPMENT REQUIRED TO ACHIEVE THE SEQUENCE OF OPERATIONS.

2. SCOPE OF WORK

A. THE WORK UNDER CONTRACT INCLUDES ALL LABOR, MATERIALS AND APPLIANCES NECESSARY FOR THE FURNISHING, INSTALLING AND TESTING, COMPLETE AND READY FOR SAFE OPERATION OF THE SYSTEMS. WORK SHALL BE INSTALLED IN A NEAT, WORKMANLIKE MANNER.

B. THE CONTRACTOR SHALL GIVE NECESSARY NOTICE, FILE DRAWINGS AND SPECIFICATIONS WITH THE DEPARTMENT HAVING JURISDICTION, OBTAIN PERMITS OR LICENSES NECESSARY TO CARRY OUT THIS WORK AND PAY ALL FEES THEREFORE. THE CONTRACTOR SHALL ARRANGE FOR INSPECTION AND TESTS OF ANY OR ALL PARTS OF THE WORK IF SO REQUIRED BY AUTHORITIES AND PAY ALL CHARGES FOR SAME. THE CONTRACTOR SHALL PAY ALL COSTS FOR, AND FURNISH TO THE OWNER BEFORE FINAL BILLING, ALL CERTIFICATES NECESSARY AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH ALL REGULATIONS WHERE THEY APPLY TO THIS WORK.

C. THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN ONE YEAR FROM THE DATE OF FINAL CERTIFICATE FOR PAYMENT AND/OR FROM DATE OR ACTUAL USE OF EQUIPMENT OR OCCUPANCY OF SPACES, BY OWNER, INCLUDED UNDER THE VARIOUS PARTS OF THE WORK, WHICHEVER DATE IS EARLIER. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL ALSO PROVIDE THAT WHERE DEFECTS OCCUR, THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENT SUPPLIED BY THE CONTRACTOR.

D. CONTROLLED INSPECTION BY A LICENSED PROFESSIONAL ENGINEER TO BE HIRED BY THIS CONTRACTOR ON BEHALF OF OWNER.

E. PRIOR TO THE INSTALLATION OF ANY WORK AND PROCUREMENT OF EQUIPMENT PROVIDE COMPLETE SET OF COORDINATED SHOP DRAWINGS OF ALL NEW AND EXISTING EQUIPMENT, DUCTWORK, PIPING AND CONTROL SYSTEMS INDICATING CAPACITY DIMENSIONS AND SEQUENCE OF OPERATION FOR WRITTEN APPROVAL BY THE ARCHITECT AND ENGINEER.

F. CONTRACTOR SHALL ATTAIN THE SERVICES OF A LICENSED PROFESSIONAL ENGINEER (PE) TO PREPARE AND SUBMIT ALL FABRICATION DRAWINGS, SIGNED AND SEALED BY THE AFOREMENTIONED PE, PERTAINING TO THE NEW STEAM SERVICE TO CONSOLIDATED EDISON FOR APPROVAL. THE CONTRACTOR SHALL PROVIDE ALL DRAWINGS, CALCULATIONS AND DOCUMENTATION REQUIRED BY CONSOLIDATED EDISON PURSUANT TO THEIR STANDARDS AND REGULATIONS FOR SUCH WORK.

3. SHOP DRAWINGS

A. INDICATE ON EACH SUBMISSION: PROJECT NAME AND LOCATION, ARCHITECT AND ENGINEER, ITEM IDENTIFICATION AND APPROVAL STAMP OF PRIME CONTRACTOR.

B. SUBMISSIONS:

1) SUBMISSIONS 11 IN. X 17 IN. OR SMALLER: IF THE SUBMISSION IS A CATALOG CUT, THEN THE CONTRACTOR SHALL SUBMIT ONE ORIGINAL AND TWO COPIES. OTHERWISE, THE CONTRACTOR SHALL SUBMIT THREE COPIES. THE ARCHITECT WILL FORWARD THE ORIGINAL AND ONE COPY (TWO COPIES WHEN NO ORIGINAL IS RECEIVED) TO THE ENGINEER. ALL CATALOG CUTS SHALL BE COMPLETE.

2) SUBMISSIONS LARGER THAN 11 IN. X 17 IN.: SUBMIT TWO PRINTS AND ONE PAPER SEPIA TO THE ARCHITECT. THE ARCHITECT WILL FORWARD ONE PRINT AND THE PAPER SEPIA TO THE ENGINEER. 6

C. SUBMIT SHOP DRAWINGS FOR HVAC EQUIPMENT LISTED IN THE MECHANICAL SCHEDULES AND DRAWINGS SUCH AS, BUT NOT LIMITED TO THE FOLLOWING:

1) DUCTWORK & PIPING LAYOUT.
2) VIBRATION ISOLATION.
3) DUCTWORK & PIPING INSULATION.
4) AIR BALANCING REPORT
5) ROOF MOUNTED FANS.
6) INLINE FANS.
7) AIR OUTLETS.
8) LEAK DETECTORS.
9) SEQUENCE OF OPERATIONS.
10) RTUs.
11) EDH.
12) AIR DECK

4. AS-BUILTS AND EQUIPMENT OPERATION INSTRUCTIONS

A. ON COMPLETION AND ACCEPTANCE OF WORK, THIS CONTRACTOR SHALL FURNISH WRITTEN INSTRUCTIONS, EQUIPMENT MANUALS AND DEMONSTRATE TO THE OWNER THE PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT AND APPARATUS FURNISHED UNDER THIS CONTRACT.

B. THESE INSTRUCTIONS SHALL BE TYPED ON 8-1/2 IN. X 11 IN. PAPER AND BOUND IN THREE-RING BINDERS WITH CLEAR ACETATE COVERS. THE CONTRACTOR SHALL GIVE THREE COPIES OF THE INSTRUCTIONS TO THE OWNER AND ONE COPY TO THE ENGINEER.

C. THE INSTRUCTION BOOKLET SHALL BE ORGANIZED IN SECTIONS, WITH ONE SECTION PER SYSTEM. THE COVER OF THE INSTRUCTION BOOKLET SHALL BEAR THE NAME, ADDRESS AND PHONE NUMBER OF THE PROJECT, ARCHITECT, ENGINEER, MECHANICAL CONTRACTOR AND SUBCONTRACTORS.

D. REPRODUCIBLE "AS-BUILT" DRAWINGS INDICATING AS INSTALLED CONDITIONS SHALL BE PROVIDED TO THE ARCHITECT AFTER COMPLETION OF THE INSTALLATION.

5. SHEET METAL WORK

A. EXCEPT AS OTHERWISE SHOWN OR NOTED, ALL DUCTWORK AND OTHER SHEET METAL WORK SHALL BE GALVANIZED SHEET STEEL AND SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION, INC. DUCT CONSTRUCTION STANDARDS, PRESSURE CLASSIFICATION 2 IN. W.G.

B. FOR DUCTWORK SYSTEMS WHERE AIR MOVING EQUIPMENT (I.E. FANS, AIR HANDLERS ETC.) ASSOCIATED WITH THAT SYSTEM IS IN EXCESS OF 2" WG PRESSURE CLASS, PROVIDE THE REQUIRED PRESSURE CLASS DUCTWORK PURSUANT TO SMACNA STANDARDS. PRESSURE CLASS OF DUCT SYSTEM SHALL BE THE CLOSEST PRESSURE RATING HIGHER THAN THAT OF THE FAN'S STATIC PRESSURE RATING. REFER TO MECHANICAL SCHEDULES FOR PRESSURE INFORMATION.

C. VOLUME DAMPERS: GALVANIZED STEEL, PER SMACNA "LOW VELOCITY MANUAL, EXCEPT PROVIDE BEARING AT ONE END OF DAMPER ROD AND QUADRANT, WITH LEVER AND LOCKSCREW AT OTHER END. FOR INSULATED DUCTS, QUADRANTS MOUNTED ON COLLAR TO CLEAR INSULATION. INSTALL WITH LEVERS ACCESSIBLE.

D. DUCT ACCESS DOORS (DOES NOT APPLY TO KITCHEN EXHAUST ACCESS DOORS): INSULATED OR UNINSULATED, SAME AS DUCT.

1) PROVIDE MINIMUM 20 IN. X 14 IN. ON MAIN DUCTS, AND 12 IN. X 6 IN. ON BRANCH DUCTS, UNLESS OTHERWISE APPROVED, AT FIRE DAMPERS, AND AT ALL DUCT ACCESSORIES SUCH AS FIRE DAMPERS, COMBINATION FIRE AND SMOKE DAMPERS, DUCT SMOKE DETECTORS, MOTORIZED DAMPERS, LOUVERS, DUCT MOUNTED TEMPERATURE SENSORS, AND ENTHALPY SENSORS.

2) ALL ACCESS DOORS TO BE HINGED, WITH LATCH SIMILAR TO VENTLOCK NO. 100.

E. ALL DUCTWORK RISERS INSTALLED OUTDOORS SHALL BE COMPOSED OF WEATHERPROOF MATERIALS OR FINISHED WITH A WEATHERPROOF COATING ALONG THE ENTIRE OUTDOOR RUN.

F. FLEXIBLE CONNECTIONS: NEOPRENE-COATED GLASS FABRIC, 30 OZ PER SQ YD WITH SEWED AND CEMENTED SEAMS, SIMILAR TO VENT FABRICS. PROVIDE WITH METAL COLLARS. ALLOW MINIMUM MOVEMENT OF 1 IN.

G. TURNING VANES: GALVANIZED STEEL SMALL DOUBLE-THICKNESS VANES WITH 2 IN. INSIDE RADIUS.

H. COMBINATION FIRE AND SMOKE DAMPERS: UL LISTED, GALVANIZED STEEL CONSTRUCTION MULTI-BLADED TYPE, EQUIPPED WITH FUSIBLE LINK CONFORMING TO NFPA STANDARD 90A. SIMILAR TO RUSKIN MODEL FSD 60 FOR 1-1/2 HOUR RATING. SEE PLANS FOR MORE INFORMATION.

I. ALL DUCT DIMENSIONS INDICATED ON PLANS ARE INSIDE CLEAR DIMENSIONS.

J. AUTOMATIC DAMPERS: COMPLETE WITH LINKAGE AND ELECTRIC OPERATOR. OPPOSED BLADE DAMPER OR GALVANIZED STEEL MIN. 4 IN., MAX. 8 IN. WIDE WITH COMPRESSIBLE EDGE SEALS TO PREVENT LEAKAGE. FACTORY-ASSEMBLE STEEL LINKAGE AND SHAFT WITH NYLON OR OIL-IMPREGNATED BRONZE BEARINGS. MOTOR WITH SUFFICIENT POWER TO LIMIT LEAKAGE TO 10 CFM PER SQ FT. LINKAGE TO WITHSTAND LOAD EQUAL TO TWICE MAXIMUM OPERATING FORCE WITHOUT DEFLECTION. DAMPER MOUNTED IN WELDED STEEL CHANNEL FRAME.

K. WIRE MESH SCREEN (WMS): NO. 16 USSG, 1/2" SQUARE MESH, IN 1 IN. WIDE GALVANIZED STEEL ENCLOSING FRAME. FLANGED DUCT OPENING TO RECEIVE FRAME.

L. LOW PRESSURE FLEXIBLE DUCT: SHALL BE A FACTORY FABRICATED HIGH TEMPERATURE COPOLYMER IMPREGNATED GLASS FABRIC, LOCKED TO COLD ROLLED FLAT STEEL SPIRAL. SIMILAR TO WIREMOLD 57. MAXIMUM INSTALLED LENGTH SHALL NOT EXCEED 18 IN.

M. CONTRACTOR SHALL HIRE STRUCTURAL ENGINEER TO ANALYZE DUCTWORK HANGING AND SUPPORTS AND CONNECTION TO EXISTING STRUCTURE.

6. NOISE CONTROL

A. ALL ROOM NC LEVELS SHALL BE 35 OR LESS.

B. PROVIDE SOUNDLINING FOR THE FOLLOWING DUCTWORK:

1) ALL DUCTWORK WITHIN MECHANICAL ROOMS AND NOT LESS THAN 20 FT ON EACH SIDE OF ALL FANS AND AC UNITS.

2) AIR TRANSFER DUCTS.

3) ALL MIXED AIR PLENUMS, EXCEPT WHERE MOISTURE CARRYOVER FROM OUTDOOR AIR LOUVER WILL OCCUR.

4) ALSO WHERE NOTED ON A DRAWING.

C. SOUNDLINING IN DUCTWORK: FIBROUS GLASS, MINIMUM 3 LB DENSITY, 1 IN. THICKNESS, MAXIMUM 0.25 K FACTOR AT 75 DEG F MEAN TEMPERATURE WITH ACRYLIC COATED FINISH FACTORY APPLIED EDGE COATING AND STENCILED IN ACCORDANCE WITH NFPA 90. FLAMESPREAD SHALL BE A MAXIMUM OF 25. LINING SHALL NOT SUPPORT MICROBIAL GROWTH AND SHALL BE TESTED IN ACCORDANCE WITH ASTM C 1071 AND ASTM G21/G22. SIMILAR TO MANVILLE PERMACOTE LINA COUSTIC.

D. ALL SOUNDLINING, ADHESIVES, FACES AND ACCESSORIES TO BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, EXCEPT AS OTHERWISE NOTED.

7. TESTING AND BALANCING

A. AIR BALANCING SHALL BE ACCOMPLISHED BY ADJUSTMENT OF FANS AND BRANCH DAMPERS FOR MAJOR ADJUSTMENTS. ADJUSTMENT OF TERMINAL DAMPERS AND DEVICES SHALL BE FOR TRIM OR MINOR ADJUSTMENT ONLY. THIS SHALL BE DONE TO PERMIT THE LEAST NOISE GENERATION TO THE SPACE WHILE PROVIDING THE REQUIRED AMOUNT OF AIR PER THE MECHANICAL DRAWINGS.

B. THE CONTRACTOR SHALL PROVIDE ALL LABOR, PRESSURE GAUGES, FLOW METERS, SHEAVES, AND BELTS REQUIRED TO BALANCE SYSTEMS.

C. BALANCING REPORT SHALL BE PROVIDED ON AABC-TYPE FORMS.

D. FANS, AIR HANDLING UNITS, PACKAGED VERTICAL A/C UNITS, HORIZONTAL CEILING HUNG UNITS, INLINE EXHAUST FANS, MAKEUP AIR UNITS, WATER SOURCE HEAT PUMPS, ETC SHALL BE BALANCED TO WITHIN +5% OF THEIR DESIGN CAPACITIES. ALL OTHER AIR QUANTITIES SHALL BE BALANCED TO WITHIN +10% OF THE DESIGN QUANTITIES.

`

E. WATER BALANCING SHALL BE ACCOMPLISHED BY ADJUSTMENT OF BALANCING VALVES AT PUMPS FOR PROPER FLOW. ADJUST FLOW THROUGH COILS, PUMPS, LANDLORDS COOLING TOWER, WATER COOLED CONDENSERS, ETC.

F. CONTRACTOR TO PROVIDED PROCEDURE FOR FLUSHING AND FILLING ALL CONDENSER WATER PIPING.

G. BALANCING AND TESTING SHALL BE PERFORMED AND SUPERVISED BY AN INDEPENDENT FIRMS SPECIALIZING IN TESTING AND BALANCING.

H. THE PERFORMANCE AND CAPACITY OF ALL SYSTEMS AND EQUIPMENT TO BE DEMONSTRATED BY THE CONTRACTOR.

8. INSULATION - GENERAL REQUIREMENTS

A. ALL INSULATION MATERIALS, INCLUDING JACKETS, FACING, ADHESIVE, COATINGS, AND ACCESSORIES ARE TO BE FIRE HAZARD RATED AND LISTED BY UNDERWRITERS LABORATORIES, INC. USING STEINER TUNNEL TEST METHOD FOR FIRE HAZARD CLASSIFICATION OF BUILDING MATERIALS, STANDARD UL 723 (ASTM E-84), (ASA A2.5-1963). FLAMESPREAD: MAXIMUM 25. FUEL CONTRIBUTED AND SMOKE DEVELOPED: MAXIMUM 50. FLAMEPROOFING TREATMENTS SUBJECT TO DETERIORATION FROM MOISTURE OR HUMIDITY ARE NOT ACCEPTABLE.

B. ALL INSULATION MATERIALS AND THICKNESSES SHALL COMPLY WITH THE LATEST EDITION (I.E. THE ADDITION IN EFFECT AT THE ANTICIPATED STATE DATE OF CONSTRUCTION) OF THE FLORIDA STATE ENERGY CONSERVATION CONSTRUCTION CODE AND SUBSEQUENT ADDENDA.

C. ALL FACINGS SHALL BE PAINTABLE. COLOR(S) SHALL BE AS SPECIFIED BY ARCHITECT.

D. DEFINITIONS:

1) EXPOSED: INDOOR DUCTS, PIPING OR EQUIPMENT LOCATED IN MECHANICAL EQUIPMENT ROOMS AND IN AREAS WHICH WILL BE VISIBLE WITHOUT REMOVING CEILINGS OR OPENING ACCESS PANELS.

2) CONCEALED: INDOOR DUCTS, PIPING OR EQUIPMENT WHICH IS NOT EXPOSED.

3) OUTDOOR: DUCTS, PIPING OR EQUIPMENT WHICH IS EXPOSED TO THE WEATHER.

9. DUCTWORK INSULATION

A. INSULATE ALL DUCTWORK IN ACCORDANCE WITH INSULATION SCHEDULE EXCEPT AS OTHERWISE NOTED. INSULATION MATERIALS AND THICKNESSES SHALL COMPLY WITH THE LATEST EDITION OF THE FLORIDA ENERGY CONSERVATION CODE, (AT THE TIME OF ANTICIPATED CONSTRUCTION DATE).

INSULATION SCHEDULE - DUCTWORK

SERVICE	LOCATION	THICKNESS	MATERIAL	FINISH
SUPPLY/RETURN	CONCEALED	1-1/2"	D-1	VAPORSEAL
SUPPLY/RETURN	EXPOSED	1-1/2"	D-2	VAPORSEAL
OUTSIDE AIR	ALL	3"	D-3	VAPORSEAL

B. DUCTWORK NOT REQUIRED TO BE THERMALLY INSULATED:

1) WHERE SOUNDLINING IS OF MINIMUM THICKNESS SPECIFIED FOR INSULATION.

2) AIR CONDITIONING RETURN AIR DUCTWORK EXPOSED IN AIR CONDITIONED SPACES AND INSTALLED IN HUNG CEILINGS WHERE SPACE IMMEDIATELY ABOVE AND BELOW ARE BOTH AIR CONDITIONED.

C. MATERIAL:

1) TYPE D-1: MINIMUM 1-LB/CUFT. DENSITY FIBERGLASS BLANKET, MAXIMUM 0.27 K-FACTOR AT 75 DEG F MEAN TEMPERATURE WITH FACTORY-APPLIED FOIL-SKRIM-KRAFT VAPOR RETARDANT FACING SIMILAR TO OWENS CORNING SOFTR FRK OR AN APPROVED EQUAL.

2) TYPE D-2: FIBERGLASS LINER. THE MAX. K FACTOR SHALL BE 0.23 AT 75° F MEAN TEMPERATURE. THE INSULATION SHALL BE PROVIDED WITH A FACTORY-APPLIED ALL PURPOSE OR ALL SERVICE FACING. THE INSULATION SHALL BE EQUAL TO JONS MANVILLE LINACOUSTIC.

3) TYPE D-3: MINIMUM 6 LB FIBERGLASS BOARD. MAXIMUM 0.22 K-FACTOR AT 75 DEG F MEAN TEMPERATURE WITH FACTORY APPLIED ALL PURPOSE OR ALL SERVICE FACING. SIMILAR TO JOHNS MANVILLE 800 SERIES, 817 SPIN-GLAS AP.

D. INSTALLATION:

1) FIBERGLASS BLANKET: 2 IN. LAP STRIPS AT ALL SEAMS. SECURE BOTTOM OF ALL DUCTS OVER 24 IN. WIDE WITH MIN. 2 ROWS OF WELD PINS 12 IN. ON CENTER. SECURE ALL SEAMS WITH FOIL VAPOR BARRIER TAPE AND VAPORSEAL ADHESIVE.

2) FIBERGLASS LINER: LINER SHALL BE ADHERED TO THE SHEET METAL WITH FULL COVERAGE OF AN APPROVED ADHESIVE THAT CONFORMS TO ASTMC 916, AND ALL EXPOSED LEADING EDGES AND TRANSVERSE JOINTS SHALL BE COATED WITH PERMACOTE FACTORY-APPLIED OR FIELD APPLIED EDGE COATING AND SHALL BE NEATLY BUTTED WITHOUT GAPS. METAL NOSINGS SHALL BE SECURELY INSTALLED OVER TRANSVERSELY ORIENTED LINER EDGES FACING THE AIRSTREAM AT FORWARD DISCHARGE AND AT ANY POINT WHERE LINED DUCT IS PRECEDED BY UNLINED DUCT. LINER SHALL BE ADDITIONALLY SECURED WITH MECHANICAL FASTENERS SPACED PER MANUFACTURERS RECOMMENDATION. THE PIN LENGTH SHOULD BE SUCH AS TO HOLD THE MATERIAL FIRMLY IN PLACE WITH MINIMUM COMPRESSION OF THE MATERIAL. 6

13. CONDENSATE DRAIN PIPING

A. PIPE: ASTM B88, HARD DRAWN COPPER TUBING TYPE "L".

B. FITTINGS: BRAZED.

C. PITCH, EXCEPT AS NOTED:

1) 1 IN. IN 4 FT PREFERRED.

2) 1 IN. IN 8 FT MINIMUM.

D. SWING CHECK VALVES: AT CONDENSATE PUMP DISCHARGE. 300 LB WOG, BRONZE BODY SOLDER ENDS, REGRIND BRONZE DISC TO BE USED WITH COPPER TUBING. JENKINS FIG. 1222.

5/22/2024 8:57:18 AM

sg

sweetgreen

3101 W. EXPOSITION BLVD.
LOS ANGELES, CALIFORNIA 90018

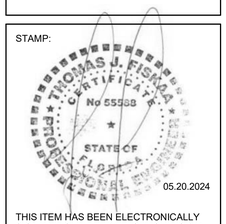
THESE DRAWINGS & SPECIFICATIONS ARE CONFIDENTIAL AND SHALL REMAIN THE SOLE PROPERTY OF SWEETGREEN CORPORATION. THEY SHALL NOT BE REPRODUCED (IN WHOLE OR IN PART), SHARED WITH THIRD PARTIES OR USED IN ANY MANNER ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF SWEETGREEN CORPORATION. THESE DRAWINGS & SPECIFICATIONS ARE INTENDED TO EXPRESS DESIGN INTENT FOR A PROTOTYPICAL SWEETGREEN STORE (WHICH IS SUBJECT TO CHANGE AT ANY TIME) AND MAY NOT REFLECT ACTUAL SITE CONDITIONS. NEITHER PARTY SHALL HAVE ANY OBLIGATION NOR LIABILITY TO THE OTHER (EXCEPT AS STATED ABOVE) UNTIL A WRITTEN AGREEMENT IS FULLY EXECUTED.

ARCHITECT OF RECORD:

O'NEIL LANGAN
ARCHITECTS

15 WEST 37TH STREET
15TH FLOOR
NEW YORK, NY 10018
PHONE: 212-279-2670
FAX: 212-279-2671

STAMP:



05.20.2024

THIS ITEM HAS BEEN ELECTRONICALLY SIGN AND SEALED BY THOMAS J FISKAA ON 5/20/24 USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COP

H.V.A.C. SPECIFICATIONS:

14. VIBRATION ISOLATION

A. GENERAL:

1) PROVIDE ISOLATION FOR EQUIPMENT, PIPING AND DUCTWORK.

2) INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

3) PROVIDE LEVELING DEVICES AND APPROVED RESILIENT RESTRAINING DEVICES AS REQUIRED TO LIMIT EQUIPMENT AND PIPING MOTION IN EXCESS OF 1/4 IN.

4) ACCEPTABLE MANUFACTURERS:

a. MASON INDUSTRIES, INC.

b. VIBRATION ELIMINATOR CO.

c. KORFUND DYNAMICS CORP.

B. CEILING-HUNG FANS AND EQUIPMENT:

1) PROVIDE SPRING HANGER ROD ISOLATORS. STEEL COMPRESSION SPRING AND NEOPRENE SOUND PAD WITHIN A STEEL RETAINER BOX. SIMILAR TO MASON TYPE PCHS.

2) 1 IN. MINIMUM STATIC DEFLECTION. 1/2 IN. MINIMUM RESERVE DEFLECTION. FACTORY-PRELOADED TO 75% OF RATED LOAD.

3) PROVIDE SUPPLEMENTAL STEEL AS REQUIRED WHERE EQUIPMENT OR STRUCTURE CANNOT SUPPORT POINT LOADS.

C. FLOOR MOUNTED EQUIPMENT HAVING INTERNAL ISOLATION:

1) PROVIDE 5/16 IN.-THICK NEOPRENE ACOUSTICAL BASE PADS OF RIBBED OR WAFFLE CONSTRUCTION. SIMILAR TO MASON TYPE W.

2) 50 PSI MAXIMUM LOADING. PROVIDE STEEL BEARING PLATE TO DISTRIBUTE LOAD WHERE REQUIRED.

D. FLOOR-MOUNTED EQUIPMENT REQUIRING EXTERNAL VIBRATION ISOLATION:

1) PROVIDE BUILT-IN RESILIENT VERTICAL LIMIT STOPS. PROVIDE TWO LAYERS OF 1/4 IN. NEOPRENE BASE PAD SEPARATED BY 1/16 IN. SHEET STEEL. TAPPED HOLES SHALL BE IN TOP PLATE FOR BOLTING TO EQUIPMENT. ISOLATORS SHALL BE CAPABLE OF SUPPORTING EQUIPMENT AT A FIXED ELEVATION DURING ISOLATION.

2) 1 IN. MINIMUM STATIC DEFLECTION.

3) CORROSION RESISTANT WHEN EXPOSED TO WEATHER.

15. HVAC EQUIPMENT SPECIFICATIONS - SEE MECHANICAL SCHEDULES FOR MORE INFORMATION:

A. PACKAGED GAS - FIRED ROOFTOP UNIT (RTU-1,2)

1) GENERAL:

a. THE UNITS AIRFLOW DIRECTION SHALL BE AS SHOWN IN THE PLANS.

b. THE OPERATING RANGE SHALL BE BETWEEN 115°F AND 0°F IN COOLING AS STANDARD FROM THE FACTORY FOR ALL UNITS. COOLING PERFORMANCE SHALL BE RATED IN ACCORDANCE WITH AHRI TESTING PROCEDURES. ALL UNITS SHALL BE FACTORY ASSEMBLED, INTERNALLY WIRED, FULLY CHARGED WITH R-410A, AND 100 PERCENT RUN TESTED TO CHECK COOLING OPERATION, FAN AND BLOWER ROTATION AND CONTROL SEQUENCE, BEFORE LEAVING THE FACTORY.

c. WIRING INTERNAL TO THE UNIT SHALL BE COLORED AND NUMBERED FOR SIMPLIFIED IDENTIFICATION.

d. UNITS SHALL BE UL LISTED AND LABELED, CLASSIFIED IN ACCORDANCE TO UL 1995/C 22.2, 236-05 3RD EDITION.

2) CASING:

a. UNIT CASING SHALL BE CONSTRUCTED OF ZINC COATED, HEAVY GAUGE, GALVANIZED STEEL. EXTERIOR SURFACES SHALL BE CLEANED, PHOSPHATIZED, AND FINISHED WITH A WEATHER-RESISTANT BAKED ENAMEL FINISH. UNIT'S SURFACE SHALL BE TESTED 672 HOURS IN A SALT SPRAY TEST IN COMPLIANCE WITH ASTM B117.

b. CABINET CONSTRUCTION SHALL ALLOW FOR ALL MAINTENANCE ON ONE SIDE OF THE UNIT. IN ORDER TO ENSURE A WATER AND AIR TIGHT SEAL, SERVICE PANELS SHALL HAVE LIFTING HANDLES AND NO MORE THAN THREE SCREWS TO REMOVE. ALL EXPOSED VERTICAL PANELS AND TOP COVERS IN THE INDOOR AIR SECTION SHALL BE INSULATED WITH A 1/2 INCH, 1 POUND DENSITY FOIL-FACED, FIRE-RESISTANT, PERMANENT, ODORLESS, GLASS FIBER MATERIAL. THE BASE OF THE DOWNFLOW UNIT SHALL BE INSULATED WITH 1/2 INCH, 1 POUND DENSITY FOIL-FACED, CLOSED-CELL MATERIAL.

c. THE DOWNFLOW UNIT'S BASE PAN SHALL HAVE NO PENETRATIONS WITHIN THE PERIMETER OF THE CURB OTHER THAN THE RAISED 11/8 INCH HIGH SUPPLY/RETURN OPENINGS TO PROVIDE AN ADDED WATER INTEGRITY PRECAUTION, IF THE CONDENSATE DRAIN BACKS UP.

3) UNIT TOP:

a. THE TOP COVER SHALL BE ONE PIECE, OR WHERE SEAMS EXIST, DOUBLE HEMMED AND GASKET SEALED TO PREVENT WATER LEAKAGE.

4) FILTERS:

a. TWO INCH MERV 13 FILTERS SHALL BE FACTORY SUPPLIED ON ALL UNITS. OPTIONAL TWO INCH PLEATED MEDIA FILTERS SHALL BE AVAILABLE

5) COMPRESSORS:

a. ALL UNITS SHALL HAVE DIRECT-DRIVE, HERMETIC, SCROLL TYPE COMPRESSORS WITH CENTRIFUGAL TYPE OIL PUMPS.

b. MOTOR SHALL BE SUCTION GAS-COOLED AND SHALL HAVE A VOLTAGE UTILIZATION RANGE OF PLUS OR MINUS 10 PERCENT OF NAMEPLATE VOLTAGE. INTERNAL OVERLOADS SHALL BE PROVIDED WITH THE SCROLL COMPRESSORS.

c. ALL MODELS SHALL HAVE CRANKCASE HEATERS, PHASE MONITORS AND LOW AND HIGH PRESSURE CONTROL AS STANDARD.

6) CRANKCASE HEATERS:

a. THESE BAND HEATERS PROVIDE IMPROVED COMPRESSOR RELIABILITY BY WARMING THE OIL TO PREVENT MIGRATION DURING OFF-CYCLES OR LOW AMBIENT CONDITIONS.

7) REFRIGERANT CIRCUITS:

a. EACH REFRIGERANT CIRCUIT SHALL HAVE INDEPENDENT FIXED ORIFICE OR THERMOSTATIC EXPANSION DEVICES, SERVICE PRESSURE PORTS, AND REFRIGERANT LINE FILTER DRIERS FACTORY INSTALLED AS STANDARD.

b. AN AREA SHALL BE PROVIDED FOR REPLACEMENT SUCTION LINE DRIERS

8) GAS HEATING SECTION:

a. THE HEATING SECTION SHALL HAVE A DRUM AND TUBE HEAT EXCHANGER DESIGN USING CORROSION RESISTANT STEEL COMPONENTS.

b. A FORCED COMBUSTION BLOWER SHALL SUPPLY PREMIXED FUEL TO A SINGLE BURNER IGNITED BY A PILOTLESS HOT SURFACE IGNITION SYSTEM

9) MICRO-CHANNEL COILS:

a. THE EVAPORATOR COIL AND CONDENSER COIL SHALL BE LEAK TESTED TO 600 PSIG. THE ASSEMBLED UNIT SHALL BE LEAK TESTED TO 465 PSIG.

10) OUTDOOR FANS:

a. THE OUTDOOR FAN SHALL BE DIRECT-DRIVE, STATICALLY AND DYNAMICALLY BALANCED, DRAW-THROUGH IN THE VERTICAL DISCHARGE POSITION.

b. THE FAN MOTOR(S) SHALL BE PERMANENTLY LUBRICATED AND SHALL HAVE BUILT-IN THERMAL OVERLOAD PROTECTION.

11) INDOOR FANS:

a. UNITS ABOVE SHALL HAVE BELT DRIVEN, FC CENTRIFUGAL FANS WITH ADJUSTABLE MOTOR SHEAVES. UNITS WITH STANDARD MOTORS SHALL HAVE AN ADJUSTABLE IDLER-ARM ASSEMBLY FOR QUICK-ADJUSTMENT OF FAN BELTS AND MOTOR SHEAVES.

b. ALL MOTORS SHALL BE THERMALLY PROTECTED.

c. ALL INDOOR FAN MOTORS MEET THE U.S. ENERGY POLICY ACT OF 1992.

12) CONTROLS:

a. UNIT SHALL BE COMPLETELY FACTORY WIRED WITH NECESSARY CONTROLS AND CONTACTOR PRESSURE LUGS OR TERMINAL BLOCK FOR POWER WIRING. UNIT SHALL PROVIDE AN EXTERNAL LOCATION FOR MOUNTING A FUSED DISCONNECT DEVICE. RELIATEL CONTROLS SHALL BE PROVIDED FOR ALL 24 VOLT CONTROL FUNCTIONS

13) ECONOMIZER:

a. THE ASSEMBLY INCLUDES FULLY MODULATING 0-100 PERCENT MOTOR AND DAMPERS, BAROMETRIC RELIEF, MINIMUM POSITION SETTING, PRESET LINKAGE, WIRING HARNESS WITH PLUG, FIXED DRY BULB AND SPRING RETURN ACTUATOR.

b. THE BAROMETRIC RELIEF DAMPER SHALL BE STANDARD WITH THE DOWNFLOW ECONOMIZER AND SHALL PROVIDE A PRESSURE OPERATED DAMPER THAT SHALL BE GRAVITY CLOSING AND SHALL PROHIBIT ENTRANCE OF OUTSIDE AIR DURING THE EQUIPMENT "OFF" CYCLE.

c. SOLID STATE ENTHALPY AND DIFFERENTIAL ENTHALPY CONTROL SHALL BE FIELD-INSTALLED.

14) APPROVED MANUFACTURERS:

a. TRANE. (BASIS OF DESIGN).
b. CARRIER.
c. APPROVED EQUAL.

B. CENTRIFUGAL INLINE DIRECT DRIVE FANS - (TX-1, GX-1)

1) DUCT MOUNTED SUPPLY, EXHAUST OR RETURN FANS SHALL BE OF CENTRIFUGAL, DIRECT DRIVEN IN-LINE TYPE.

2) THE FAN HOUSING SHALL BE OF THE SQUARE DESIGN, CONSTRUCTED OF HEAVY GAUGE GALVANIZED STEEL AND SHALL INCLUDE SQUARE DUCT MOUNTING COLLARS.

3) FAN CONSTRUCTION SHALL INCLUDE TWO REMOVABLE ACCESS PANELS LOCATED PERPENDICULAR TO THE MOTOR MOUNTING PANEL. THE ACCESS PANELS MUST BE SUFFICIENT SIZE TO PERMIT EASY ACCESS TO ALL INTERIOR COMPONENTS.

4) THE FAN WHEEL SHALL BE CENTRIFUGAL BACKWARD INCLINED, CONSTRUCTED OF ALUMINUM AND SHALL INCLUDE A WHEEL CONE CAREFULLY MATCHED TO THE INLET CONE FOR PRECISE RUNNING TOLERANCES. WHEELS SHALL BE STATICALLY AND DYNAMICALLY BALANCED.

5) MOTORS SHALL BE PERMANENTLY LUBRICATED AND CAREFULLY MATCHED TO THE FAN LOADS. MOTORS SHALL BE READILY ACCESSIBLE FOR MAINTENANCE.

6) A NEMA 1 DISCONNECT SWITCH SHALL BE PROVIDED AS STANDARD, EXCEPT WITH EXPLOSION RESISTANT MOTORS, WHERE DISCONNECTS ARE OPTIONAL. FACTORY WIRING SHALL BE PROVIDED FROM MOTOR TO THE HANDY BOX.

7) ALL FANS SHALL BEAR THE AMCA CERTIFIED RATINGS SEAL FOR BOTH SOUND AND AIR PERFORMANCE.

8) EACH FAN SHALL BEAR A PERMANENTLY AFFIXED MANUFACTURER'S NAMEPLATE CONTAINING THE MODEL NUMBER AND INDIVIDUAL SERIAL NUMBER FOR FUTURE IDENTIFICATION.

9) ACCEPTABLE MANUFACTURERS:

a. GREENHECK (BASIS OF DESIGN).
b. LOREN COOK.
c. APPROVED EQUAL.

16. AUTOMATIC CONTROLS - GENERAL REQUIREMENTS

A. FURNISH AND INSTALL A COMPLETE ELECTRIC OR ELECTRONIC CONTROL SYSTEM TO PROVIDE TEMPERATURE CONTROL AS SPECIFIED UNDER DESCRIPTION OF OPERATION.

B. WORK SHALL INCLUDE ALL WIRING, CONTROL EQUIPMENT, AND ACCESSORIES NECESSARY TO MAKE THIS SYSTEM COMPLETE. ALL WIRING SHALL BE 24 VOLT. ALL OUTDOOR CONTROL WIRING SHALL BE INSTALLED WITHIN ELECTRICAL CONDUIT. COORDINATE WITH MANUFACTURER FOR INTERCONNECTION WITH CONTROLS INCLUDED IN EQUIPMENT. ALL CONTROL WORK SHALL BE INSTALLED BY HVAC CONTRACTOR.

C. ACCEPTABLE MANUFACTURERS:

1) JOHNSON SERVICE CO.

2) HONEYWELL, INC.

D. OPERATION OF TYPICAL CONTROL SAFETY DEVICES.

1) HOA SUPPLY FAN SWITCHES: SAFETY DEVICES SHALL BE INTERLOCKED WITH "HAND" AND "AUTOMATIC" POSITIONS IN SERIES WITH MOTOR CONTROLLER HOLDING COIL CIRCUIT. INTERLOCKING WITH OTHER FANS AND EQUIPMENT OF SYSTEM SHALL BE THROUGH "AUTOMATIC" POSITION ONLY. "HAND" POSITION SHALL BE FOR MAINTENANCE ONLY.

E. SAFETY DEVICES FOR ALL SYSTEMS, EXCEPT AS OTHERWISE NOTED BELOW:

1) ONE FREEZE PROTECTION THERMOSTAT PER COIL SECTION, WIRED TO STOP SUPPLY FAN IN THE EVENT OF LOW ENTERING AIR TEMPERATURE. THERMOSTAT SHALL BE AUTOMATIC RESET TYPE.

2) FOR SYSTEMS OVER 2,000 CFM, A DUCT MOUNTED SMOKE DETECTOR WITH SAMPLING PROBE LOCATED IN THE SUPPLY AND RETURN DUCT/PLENUM SIMILAR TO GE MODEL SIGA-SD. DUCT SHALL STOP THE SUPPLY FAN AND ASSOCIATED INTERLOCKED EQUIPMENT SHOULD PRODUCTS OF COMBUSTION BE SENSED.

3) LOW STATIC PRESSURE LIMIT SWITCHES WITH MANUAL RESET SHALL STOP ASSOCIATED SUPPLY FANS WHEN STATIC PRESSURE AT SUPPLY FOR INLET SECTIONS FALLS TO ITS SETTING.

4) HVAC PANEL(S) SHALL BE INCLUDED WITH THE FOLLOWING ALARM FEATURES:

(i) LOSS OF AIR FLOW ALARM

(ii) DRAIN PAN ALARM INDICATING A POSSIBLE OVERFLOW CONDITION

5) FILTER ALARM INDICATING FILTERS ARE DIRTY AND NEEDS TO BE CHANGED.

6) COMPRESSOR HI/LO PRESSURE ALARMS: SHUT THE APPROPRIATE COMPRESSOR AND PREVENT COMPRESSOR DAMAGE FROM EXTREME PRESSURES.

7) HEATER HI-LIMIT ALARM: SHUTS OFF THE HEATER WHEN THE TEMPERATURE RISES WITHIN THE UNIT DUE TO FAN FAILURE (I.E. NO AIRFLOW)

8) ALL ALARMS INCLUDED ON THE MECHANICAL DRAWINGS AND SEQUENCE OF OPERATIONS THAT ARE NOT INCLUDED IN THIS SECTION.

9) CONTRACTOR SHALL PROVIDE ADDITIONAL ATC WIRING AS REQUIRED FOR ALL STANDARD SAFETY FEATURED PROVIDED BY THE MANUFACTURER OF ALL SPECIFIED HVAC EQUIPMENT. 6

17. SEQUENCE OF OPERATIONS.

A) ROOF TOP UNIT (RTU-1, RTU-2):

1) FAN OFF: THROUGH PROGRAMMABLE THERMOSTAT WITH ASSOCIATED SPACE TEMPERATURE SENSOR SUPPLY FAN SHALL TURN OFF. COMPRESSOR SHALL DE-ENGERGIZE, CONDENSER FAN SHALL SHUT OFF.

2) FAN ON: THROUGH PROGRAMMABLE THERMOSTAT EVAPORATOR FAN SHALL ENERGIZE, RETURN AIR, OUTDOOR AIR INTAKE AND RELIEF AIR DISCHARGE DAMPERS SHALL MODULATE TO THEIR MINIMUM VENTILATION POSITIONS, CONDENSER FANS SHALL REMAIN OFF, COMPRESSORS SHALL REMAIN OFF.

3) COOLING MODE: THROUGH PROGRAMMABLE THERMOSTAT EVAPORATOR FAN SHALL ENERGIZE, RETURN AIR, OUTDOOR AIR INTAKE AND RELIEF AIR DISCHARGE DAMPERS SHALL MODULATE TO THEIR MINIMUM VENTILATION POSITIONS, CONDENSER FANS SHALL ENERGIZE, COMPRESSORS SHALL ENERGIZE. UPON CALL FOR COOLING THERMOSTAT SHALL CYCLE COMPRESSORS TO MAINTAIN USER ADJUSTABLE SPACE TEMPERATURE SETPOINT.

4) HEATING MODE: THROUGH PROGRAMMABLE THERMOSTAT EVAPORATOR FAN SHALL ENERGIZE, ELECTRIC HEATING COIL SHALL ENERGIZE. RETURN AIR, OUTDOOR AIR INTAKE AND RELIEF AIR DISCHARGE DAMPERS SHALL MODULATE TO THEIR MINIMUM VENTILATION POSITIONS, SYSTEM SHALL INITIALLY PROVIDE FULL HEAT. ONCE SPACE TEMPERATURE IS SATISFIED, SYSTEM SHALL MODULATE TO MAINTAIN USER ADJUSTABLE SPACE TEMPERATURE SETPOINT.

B) LEAK DETECTORS, DUCT SMOKE DETECTORS:

1) LEAK DETECTOR SHALL GENERATE A CONTROL SIGNAL WHENEVER WATER IS DETECTED. A EMOTE MOUNTED RED LED ALARM LIGHT SHALL PROVIDE A VISUAL LEAK DETECTOR SHALL HAVE AUDIBLE ALARM THAT WILL SOUND IF WATER IS DETECTED.

2) ON SMOKE DETECTION BY SMOKE DETECTOR, RTU SHALL DE-ENERGIZE. A REMOTE MOUNTED RED LED ALARM LIGHT SHALL PROVIDE A VISUAL

D) GENERAL KITCHEN EXHAUST FAN (GX-1):

1) EXHAUST FAN SHALL BE CONNECTED TO LUTRON SYSTEM.

E) TOILET EXHAUST FAN (TX-1):

1) FAN SHALL SHALL BE CONNECTED TO LUTRON SYSTEM.

5/22/2024 8:57:19 AM

sg

sweetgreen

3101 W. EXPOSITION BLVD.
LOS ANGELES, CALIFORNIA 90018

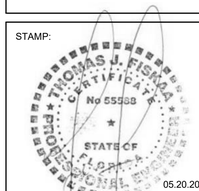
THESE DRAWINGS & SPECIFICATIONS ARE CONFIDENTIAL AND SHALL REMAIN THE SOLE PROPERTY OF SWEETGREEN CORPORATION. THEY SHALL NOT BE REPRODUCED (IN WHOLE OR IN PART), SHARED WITH THIRD PARTIES OR USED IN ANY MANNER ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF SWEETGREEN CORPORATION. THESE DRAWINGS & SPECIFICATIONS ARE INTENDED TO EXPRESS DESIGN INTENT FOR A PROTOTYPICAL SWEETGREEN STORE (WHICH IS SUBJECT TO CHANGE AT ANY TIME) AND MAY NOT REFLECT ACTUAL SITE CONDITIONS. NEITHER PARTY SHALL HAVE ANY OBLIGATION NOR LIABILITY TO THE OTHER (EXCEPT AS STATED ABOVE) UNTIL A WRITTEN AGREEMENT IS FULLY EXECUTED.

ARCHITECT OF RECORD:

O'NEIL LANGAN
ARCHITECTS

15 WEST 37TH STREET
15TH FLOOR
NEW YORK, NY 10018
PHONE: 212-279-2670
FAX: 212-279-2671

STAMP:



05.20.2024

THIS ITEM HAS BEEN ELECTRONICALLY SIGN AND SEALED BY THOMAS J FISKAA ON 5/20/24 USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT INFORMATION:
EDGE DISTRICT

PROJECT INFORMATION:
1114 CENTRAL AVENUE
ST PETERSBURG, FL 33705

DRAWN BY:	DL
CHECKED BY:	PP
PROJECT MANAGER:	DL
SG DESIGN MANAGER:	-
SG CONSTR. MANAGER:	-
PROJECT NO:	21.091.00
TEMPLATE VERSION:	06.01.2020

REVISIONS

REV.	DATE	DESCRIPTION
	12.17.2021	PERMIT SET
1	06.03.2022	REV 02
2	06.24.2022	REV 03
6	05.20.2024	PERMIT REV2

H.V.A.C. SPECIFICATIONS SHEET 2 OF 2

M-102

COM*check* Software Version COMcheckWeb

Mechanical Compliance Certificate

Project Information

Energy Code:	2020 Florida - 7th Edition
Project Title:	Sweetgreen - St. Petersburg
Location:	Saint Petersburg, Florida
Climate Zone:	2a
Project Type:	Alteration

Construction Site: 1114 Central Ave St. Petersburg, Florida 33705

Owner/Agent:

Designer/Contractor:

6

Mechanical Systems List

Quantity System Type & Description

1 RTU-1 (Single Zone):
Single Package Heat Pump
Heating Mode: Capacity = 122 kBtu/h,
Proposed Efficiency = 4.80 COP, Required Efficiency = 3.30 COP
Cooling Mode: Capacity = 118 kBtu/h, , Air Economizer
Proposed Efficiency = 11.00 EER, Required Efficiency = 11.00 EER
Proposed Part Load Efficiency = 14.60 IEER, Required Part Load Efficiency = 12.00 IEER

1 RTU-2 (Single Zone):
Single Package Heat Pump
Heating Mode: Capacity = 122 kBtu/h,
Proposed Efficiency = 3.70 COP, Required Efficiency = 3.20 COP
Cooling Mode: Capacity = 144 kBtu/h, , Air Economizer
Proposed Efficiency = 10.80 EER, Required Efficiency = 10.60 EER
Proposed Part Load Efficiency = 14.00 IEER, Required Part Load Efficiency = 11.60 IEER

1 DWH:
Electric Storage Water Heater, Capacity: 119 gallons
Proposed Efficiency: 0.14 SL, %/h (if > 12 kW), Required Efficiency: 0.53 SL, %/h (if > 12 kW)

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical alteration project 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 2020 Florida - 7th Edition requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title _____ Signature _____ Date _____

COM*check* Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2020 Florida - 7th Edition

Requirements: 31.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR2][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C103.2 [PR3][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C403.2.4.5 [FO9][1]	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature and outdoor temperature. future connection to controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41][1]	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.12.1 [ME65][1]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.2.12.3 [ME117][2]	Fans have energy index (FEI) >= 1.00 in accordance with AMCA 208. Fans for VAV systems shall have an FEI >= 0.95.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.3 [ME55][2]	HVAC equipment efficiency verified.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.2.4.7 [ME113][2]	Fault detection and diagnostics installed with air-cooled unitary DX units having economizers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.6 [ME59][1]	Natural or mechanical ventilation is provided in accordance with Florida Building Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per Florida Building Code Chapter 4.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.6.1 [ME59][1]	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.6.2 [ME115][1]	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.8 [ME141][2]	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.2.4.8.1 and C403.2.4.8.2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.7 [ME57][1]	Exhaust air energy recovery on systems meeting Table C403.2.7(1) and C403.2.7(2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.8 [ME116][2]	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.2.9.1, C403.2.9.2 [ME60][2]	HVAC ducts and plenums insulated in accordance with C403.2.9.1 and constructed in accordance with C403.2.9.2, verification may need to occur during Foundation Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.3, C403.3.1, C403.3.2 [ME62][1]	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off integrated economizer control, and provide a means to relieve excess outside air during operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.3.3.3 [ME124][1]	Air economizers automatically reduce outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.3.3.3 for applicable device types and climate zones.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.3.3.4 [ME125][1]	System capable of relieving excess outdoor air during air economizer operation to prevent overpressurizing the building. The relief air outlet located to avoid recirculation into the building.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.3.3.5 [ME126][1]	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.2.4.3 for details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.2.1 [ME53][3]	Air outlets and zone terminal devices have means for air balancing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5, C403.5.1, C403.5.2 [ME123][3]	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2..	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26][2]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.7 [EL27][2]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.8.2, C405.8.2.1 [EL28][2]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.5.3 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C403.2.1 [FI50][1]	HVAC systems and equipment design loads calculated in accordance with ANSI/ASHRAE/ACCA Standard 183 or by an approved equivalent computational procedure	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.2 [FI27][1]	HVAC systems and equipment capacity does not exceed calculated loads.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.1 [FI47][1]	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.1.1 [FI42][1]	Heat pump controls prevent supplemental electric resistance heat from coming on when not needed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.1.2 [FI38][1]	Thermostatic controls have a 5 °F deadband.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.1.3 [FI20][1]	Temperature controls have setpoint overlap restrictions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.2 [FI39][1]	Each zone equipped with setback controls using automatic time clock or programmable control system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.2.1, C403.2.4.2.2 [FI40][1]	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C404.3 [FI11][1]	Heat traps installed on supply and discharge piping of non-circulating systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.1.1 [FI57][1]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, recommendations, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated. Regular maintenance actions shall be clearly stated on accessible label.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.1 [FI28][1]	Commissioning plan developed by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.2.3.1 [FI31][1]	HVAC equipment has been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.3.2 [FI10][1]	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.3.3 [FI32][1]	Economizers have been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.4 [FI29][2]	Preliminary commissioning report completed and certified by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5.1 [FI7][3]	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5.3 [FI43][2]	An air and/or hydronic system balancing report is provided for HVAC systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5.4 [FI30][3]	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

sg

sweetgreen

3101 W. EXPOSITION BLVD.
LOS ANGELES, CALIFORNIA 90018

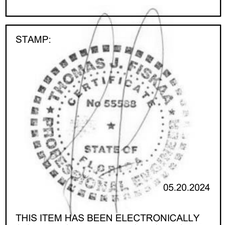
THESE DRAWINGS & SPECIFICATIONS ARE CONFIDENTIAL AND SHALL REMAIN THE SOLE PROPERTY OF SWEETGREEN CORPORATION. THEY SHALL NOT BE REPRODUCED (IN WHOLE OR IN PART), SHARED WITH THIRD PARTIES OR USED IN ANY MANNER ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF SWEETGREEN CORPORATION. THESE DRAWINGS & SPECIFICATIONS ARE INTENDED TO EXPRESS DESIGN INTENT FOR A PROTOTYPICAL SWEETGREEN STORE (WHICH IS SUBJECT TO CHANGE AT ANY TIME) AND MAY NOT REFLECT ACTUAL SITE CONDITIONS. NEITHER PARTY SHALL HAVE ANY OBLIGATION NOR LIABILITY TO THE OTHER (EXCEPT AS STATED ABOVE) UNTIL A WRITTEN AGREEMENT IS FULLY EXECUTED.

ARCHITECT OF RECORD:

O'NEIL LANGAN
ARCHITECTS

15 WEST 37TH STREET
15TH FLOOR
NEW YORK, NY 10018
PHONE: 212-279-2670
FAX: 212-279-2671

STAMP:



05.20.2024

THIS ITEM HAS BEEN ELECTRONICALLY SIGN AND SEALED BY THOMAS J FISKAA ON 5/20/24 USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT INFORMATION:
EDGE DISTRICT

PROJECT INFORMATION:
1114 CENTRAL AVENUE
ST PETERSBURG, FL 33705

DRAWN BY:	DL
CHECKED BY:	PP
PROJECT MANAGER:	DL
SG DESIGN MANAGER:	-
SG CONSTR. MANAGER:	-
PROJECT NO:	21.091.00
TEMPLATE VERSION:	06.01.2020

REVISIONS

REV.	DATE	DESCRIPTION
1	12.17.2021	PERMIT SET
2	06.03.2022	REV 02
3	06.24.2022	REV 03
6	08.15.2022	REV 04
	05.20.2024	PERMIT REV2

H.V.A.C ENERGY CODE COMPLIANCE FORMS

M-103

5/22/2024 8:57:20 AM

COM*check* Software Version 4.1.5.3

Envelope Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	Sweetgreen Arcade St. Petersburg
Location:	Saint Petersburg, Florida
Climate Zone:	2a
Project Type:	Alteration
Vertical Glazing / Wall Area:	10%

Construction Site:	Owner/Agent:	Designer/Contractor:
1114 Central Avenue Saint Petersburg, FL 33705		Ryan Welch OLA Architects

Building Area	Floor Area
1-Dining: Cafeteria/Fast Food : Nonresidential	3303

Envelope Assemblies

Post-Alteration Assembly	R-Value		Proposed		Max. Allowed	
	Cavity	Cont.	U-Factor	SHGC	U-Factor	SHGC
Roof 1: Other Roof, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (a)	---	---	0.026	---	0.027	---
Skylight 1: Vinyl/Fiberglass Frame:Glass, With Curb, Tinted, [Bldg. Use 1 - Dining: Cafeteria/Fast Food], Exemption: Surface-applied window film on single pane assembly.	---	---	0.560	0.130	0.650	0.348
NORTHEAST						
Window 1: Wood Frame:Fixed, Other, Fixed, Fixed, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	---	---	0.500	0.130	0.500	0.252
Door 1: Glass (> 50% glazing):Nonmetal Frame, Entrance Door, Entrance Door, Entrance Door, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	---	---	0.450	0.130	0.830	0.252

(a) 'Other' components require supporting documentation for proposed U-factors.
(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.

Envelope PASSES

Envelope Compliance Statement

Compliance Statement: The proposed envelope alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COM*check* Version 4.1.5.3 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

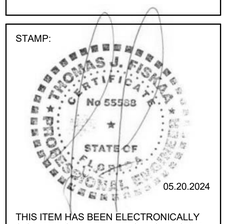
Name - Title _____ Signature _____ Date _____

sweetgreen
3101 W. EXPOSITION BLVD.
LOS ANGELES, CALIFORNIA 90018

THESE DRAWINGS & SPECIFICATIONS ARE CONFIDENTIAL AND SHALL REMAIN THE SOLE PROPERTY OF SWEETGREEN CORPORATION. THEY SHALL NOT BE REPRODUCED (IN WHOLE OR IN PART), SHARED WITH THIRD PARTIES OR USED IN ANY MANNER ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF SWEETGREEN CORPORATION. THESE DRAWINGS & SPECIFICATIONS ARE INTENDED TO EXPRESS DESIGN INTENT FOR A PROTOTYPICAL SWEETGREEN STORE (WHICH IS SUBJECT TO CHANGE AT ANY TIME) AND MAY NOT REFLECT ACTUAL SITE CONDITIONS. NEITHER PARTY SHALL HAVE ANY OBLIGATION NOR LIABILITY TO THE OTHER (EXCEPT AS STATED ABOVE) UNTIL A WRITTEN AGREEMENT IS FULLY EXECUTED.

ARCHITECT OF RECORD:
O'NEIL LANGAN
ARCHITECTS
15 WEST 37TH STREET
15TH FLOOR
NEW YORK, NY 10018
PHONE: 212-279-2670
FAX: 212-279-2671

STAMP:



05.20.2024

THIS ITEM HAS BEEN ELECTRONICALLY SIGN AND SEALED BY THOMAS J FISKAA ON 5/20/24 USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT INFORMATION:
EDGE DISTRICT

PROJECT INFORMATION:
1114 CENTRAL AVENUE
ST PETERSBURG, FL 33705

DRAWN BY:	DL
CHECKED BY:	Checker
PROJECT MANAGER:	DL
SG DESIGN MANAGER:	-
SG CONSTR. MANAGER:	-
PROJECT NO:	21.091.00
TEMPLATE VERSION:	06.01.2020

REVISIONS

REV.	DATE	DESCRIPTION
	12.17.2021	PERMIT SET
1	06.03.2022	REV 02
2	06.24.2022	REV 03
6	05.20.2024	PERMIT REV2

H.V.A.C ENERGY CODE COMPLIANCE FORMS

M-104

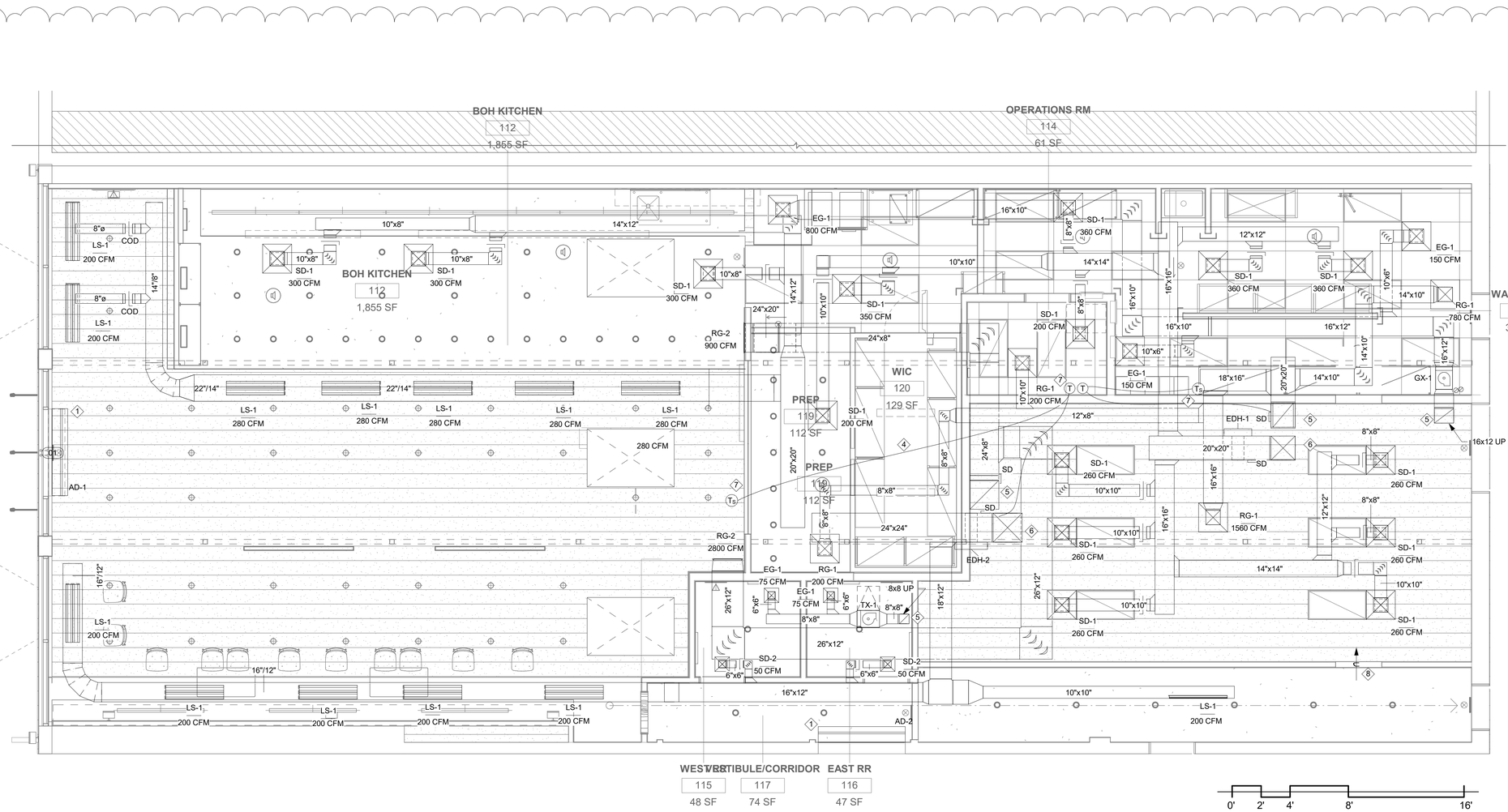
5/22/2024 8:57:21 AM

PLAN NOTES:

1. CONTRACTOR SHALL VERIFY IN FIELD EXACT DUCT ROUTING LOCATION AND CONNECTIONS. CONTRACTOR SHALL COORDINATE WITH ALL TRADES BEFORE ANY WORK IS TO BE PERFORMED. REPORT ANY DISCREPANCIES TO BUILDING MANAGEMENT AND ENGINEER.
2. CONTRACTOR SHALL INSTALL ALL NEW DUCT AS HIGH AS POSSIBLE TO THE CEILING. ALL NEW DUCTWORK SHALL BE PROPERLY SECURED AS PER MECHANICAL SPECIFICATIONS.
3. PROVIDE VOLUME DAMPERS FOR ALL BRANCH DUCTS AND CONNECTIONS TO AIR OUTLETS. PROVIDE CABLE OPERATED, CONCEALED, OPPOSED BLADE DAMPERS FOR BRANCHES AND AIR OUTLETS LOCATED IN NON-ACCESSIBLE CEILINGS MAINTAIN AREA CEILING HEIGHTS.
4. SHEET METAL DUCTWORK DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSIONS.
5. COORDINATE LOCATIONS, ACCESS AND DETAILS OF VISIBLE DEVICES AND AIR OUTLETS WITH THE ARCHITECT PRIOR TO INSTALLATION.
6. INTERNALLY LINED DUCTWORK IS REQUIRED FOR ACOUSTICAL PURPOSES. PROVIDE 1" ACOUSTICAL LINING 20 FEET UPSTREAM AND DOWNSTREAM OF ROOF TOP UNITS AND FANS.
7. PROVIDE CONNECTIONS TO AIR REGISTERS TO ALLOW FOR THE BRANCH VOLUME DAMPERS TO ROTATE WITHOUT OBSTRUCTION. SEE AIR OUTLET SCHEDULES FOR REGISTER NECK SIZES.
8. CONTRACTOR TO FULLY WALK SITE PRIOR TO SUBMITTING FINAL BID.
9. ALL TENANT HVAC SYSTEMS SHALL BE COMMISSIONED UPON COMPLETION OF CONSTRUCTION AND PRIOR TO OCCUPANCY AS PER THE REQUIREMENTS DEFINED IN THE TENANT TECHNICAL CRITERIA MANUAL.
10. REFER TO TABLE CFM'S REQUIRED AT THE CONNECTION POINT FOR AIR BALANCING PURPOSES
11. ANY USED USED HVAC EQUIPMENT, DUCTWORK, PIPING, WIRING, ETC. WITHIN OR SERVING THE DEMISED PREMISES MUST BE REMOVED.
12. TENANT SHALL INSTALL AN INDICATOR PILOT LAMP 12" ABOVE THERMOSTAT FOR THE PURPOSE OF VERIFYING EXHAUST FAN OPERATION.

REFERENCE NOTES:

1. PROVIDE AIR DOOR ABOVE ENTRANCE. REFER TO MECHANICAL SCHEDULES AND DETAILS FOR MORE INFORMATION.
2. NOT USED.
3. NOT USED.
4. PROVIDE CONDENSATE PUMP FOR WALK IN COOLER. ROUTE CONDENSATE PIPE TO NEAREST ROOF DRAIN PIPE.
5. PROVIDE FIRE DAMPER IN ROOF PENETRATION
6. FOR RTU PENETRACTION LL SUPPLIED FIRE DAMPER AND SG SUPPLIED SMOKE DETETOR.
7. COORDINATE EXACT LOCATION WITH THE ARCHITECT.
8. 2" DOOR UNDERCUT.



1 H.V.A.C. GROUND FLOOR PLANS
1/4" = 1'-0"

5/22/2024 8:57:25 AM

sg

sweetgreen

3101 W. EXPOSITION BLVD.
LOS ANGELES, CALIFORNIA 90018

THESE DRAWINGS & SPECIFICATIONS ARE CONFIDENTIAL AND SHALL REMAIN THE SOLE PROPERTY OF SWEETGREEN CORPORATION. THEY SHALL NOT BE REPRODUCED (IN WHOLE OR IN PART), SHARED WITH THIRD PARTIES OR USED IN ANY MANNER ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF SWEETGREEN CORPORATION. THESE DRAWINGS & SPECIFICATIONS ARE INTENDED TO EXPRESS DESIGN INTENT FOR A PROTOTYPICAL SWEETGREEN STORE (WHICH IS SUBJECT TO CHANGE AT ANY TIME) AND MAY NOT REFLECT ACTUAL SITE CONDITIONS. NEITHER PARTY SHALL HAVE ANY OBLIGATION NOR LIABILITY TO THE OTHER (EXCEPT AS STATED ABOVE) UNTIL A WRITTEN AGREEMENT IS FULLY EXECUTED.

ARCHITECT OF RECORD:

O'NEIL LANGAN
ARCHITECTS

15 WEST 37TH STREET
15TH FLOOR
NEW YORK, NY 10018
PHONE: 212-279-2670
FAX: 212-279-2671

STAMP:

THOMAS J. FISKAA
CERTIFICATE
No 55588
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
05.20.2024

THIS ITEM HAS BEEN ELECTRONICALLY SIGN AND SEALED BY THOMAS J FISKAA ON 5/20/24 USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT INFORMATION:
EDGE DISTRICT

PROJECT INFORMATION:
1114 CENTRAL AVENUE
ST PETERSBURG, FL 33705

DRAWN BY:	DL
CHECKED BY:	PP
PROJECT MANAGER:	DL
SG DESIGN MANAGER:	-
SG CONSTR. MANAGER:	-
PROJECT NO:	21.091.00
TEMPLATE VERSION:	06.01.2020

REVISIONS

REV.	DATE	DESCRIPTION
	12.17.2021	PERMIT SET
1	06.03.2022	REV 02
2	06.24.2022	REV 03
3	08.15.2022	REV 04
6	05.20.2024	PERMIT REV2

H.V.A.C. GROUND FLOOR PLANS

M-300

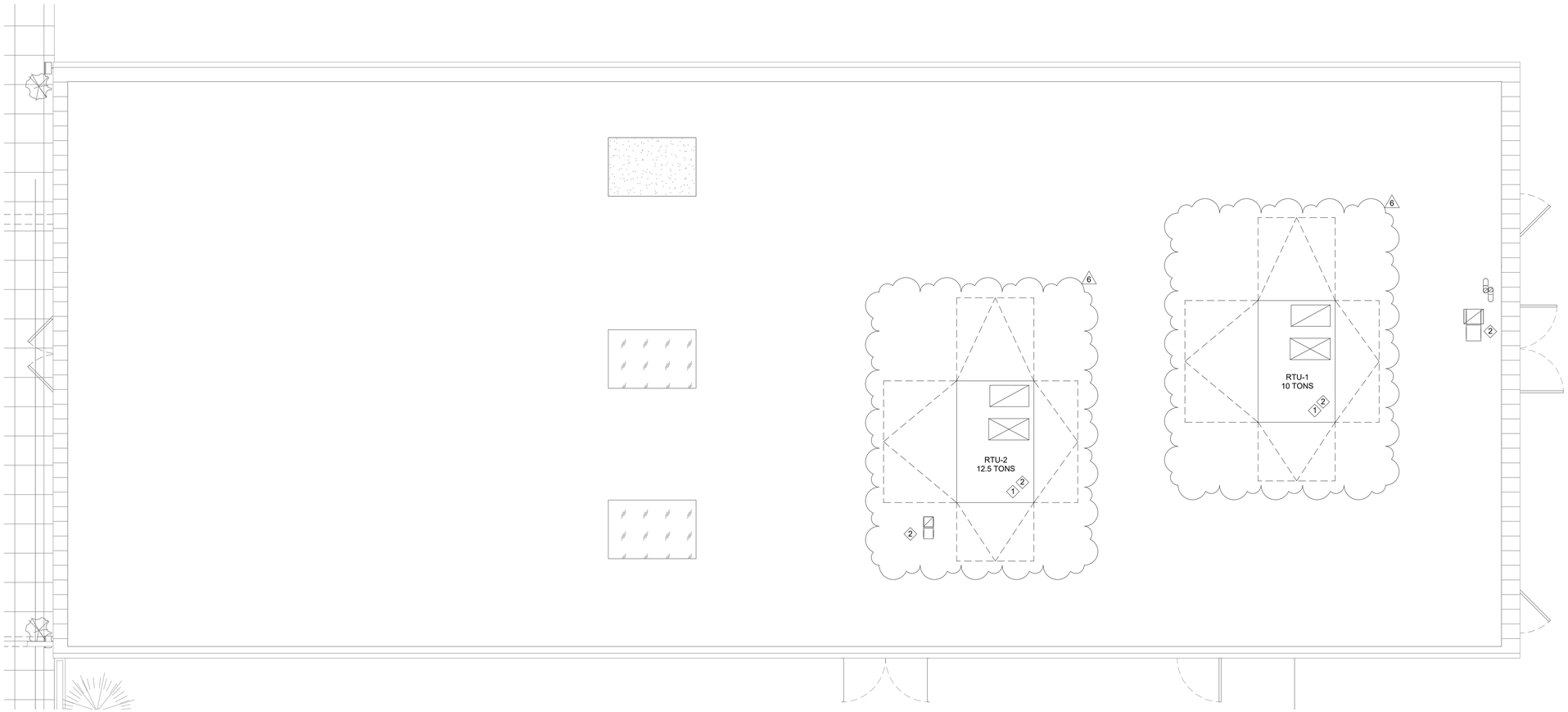
PLAN NOTES:

1. EQUIPMENT AND SUPPORT EXPOSED TO WIND FORCE MUST COMPLY WITH FBC-M 301.15. PROVIDE MIAMI-DADE COUNTY NOA CERTIFICATE (REFERENCE NOA # ON PLANS) FOR CONDENSING UNIT STANDS OR PROVIDE SIGND AND SEALED STRUCTURAL CALCULATIONS FOR SUPPORTS.

REFERENCE NOTES:

6

1. PROVIDE RTU CURB. ROOF CURB SHALL BE TC5 ROOF CURB, MANUFACTURED BY THYBAR CORPORATION, MATCHED TO EQUIPMENT SCHEDULE ON DWG, M-600. ROOF CURB SHALL MEET MIAMI-DADE WIND LOADING REQUIREMENTS. COORDINATE ROOF OPENINGS FOR DUCTWORK IN THE FIELD.
2. EXHAUST SHALL HAVE GOOSENECK TERMINATION.



1 H.V.A.C. ROOF PLANS
1/4" = 1'-0"

5/22/2024 8:57:27 AM

sg

sweetgreen

3101 W. EXPOSITION BLVD.
LOS ANGELES, CALIFORNIA 90018

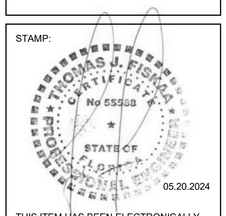
THESE DRAWINGS & SPECIFICATIONS ARE CONFIDENTIAL AND SHALL REMAIN THE SOLE PROPERTY OF SWEETGREEN CORPORATION. THEY SHALL NOT BE REPRODUCED (IN WHOLE OR IN PART), SHARED WITH THIRD PARTIES OR USED IN ANY MANNER ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF SWEETGREEN CORPORATION. THESE DRAWINGS & SPECIFICATIONS ARE INTENDED TO EXPRESS DESIGN INTENT FOR A PROTOTYPICAL SWEETGREEN STORE (WHICH IS SUBJECT TO CHANGE AT ANY TIME) AND MAY NOT REFLECT ACTUAL SITE CONDITIONS. NEITHER PARTY SHALL HAVE ANY OBLIGATION NOR LIABILITY TO THE OTHER (EXCEPT AS STATED ABOVE) UNTIL A WRITTEN AGREEMENT IS FULLY EXECUTED.

ARCHITECT OF RECORD:

O'NEIL LANGAN
ARCHITECTS

15 WEST 37TH STREET
15TH FLOOR
NEW YORK, NY 10018
PHONE: 212-279-2670
FAX: 212-279-2671

STAMP:



05.20.2024

THIS ITEM HAS BEEN ELECTRONICALLY SIGN AND SEALED BY THOMAS J FISKAA ON 5/20/24 USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT INFORMATION:
EDGE DISTRICT

PROJECT INFORMATION:
1114 CENTRAL AVENUE
ST PETERSBURG, FL 33705

DRAWN BY:	DL
CHECKED BY:	PP
PROJECT MANAGER:	DL
SG DESIGN MANAGER:	-
SG CONSTR. MANAGER:	-
PROJECT NO:	21.091.00
TEMPLATE VERSION:	06.01.2020

REVISIONS

REV.	DATE	DESCRIPTION
	12.17.2021	PERMIT SET
1	06.03.2022	REV 02
2	06.24.2022	REV 03
6	05.20.2024	PERMIT REV2

H.V.A.C. ROOF PLANS

M-301

AIR OUTLET SCHEDULE

		DESIG.	TYPE	CFM RANGE	MAX NC	NECK SIZE	FACE SIZE OR LENGTH x WIDTH	FLOW PATTERN	MANUF.	MODEL No.	REMARKS
SUPPLY	DIFFUSERS & REGISTERS	SD-1	PERFORATED CEILING DIFFUSER	0-250 250-400 400-550	< 30	8"Ø 10"Ø 12"Ø	24" x 24"	SEE PLAN	TITUS	PCS	SEE NOTES BELOW
		SD-2	CEILING MOUNTED SQUARE DIFFUSER	0-100	< 30	6"Ø	12" x 12"	SEE PLAN	TITUS	OMNI	SEE NOTES BELOW
		LS-1	LINEAR PLENUM DIFFUSER	150	<30	-	48" X 2 3/4"	SEE PLAN	TITUS	FL-10	SEE NOTES BELOW
RETURN	RETURN GRILLES	RG-1	CEILING MOUNTED RETURN GRILLE	-	< 30	-	24" X 24"	-	TITUS	PMR	SEE NOTES BELOW
		EG-1	CEILING MOUNTED EXHAUST GRILLE	-	< 30	6" X 6" 12" X 12"	12" X 12" 24" X 24"	-	TITUS	PMR	SEE NOTES BELOW

NOTES

1. COORDINATE AIR OUTLET BORDER TYPES, FRAMING, AND FINISHES WITH THE
2. PROVIDE ALL AIR OUTLETS WITH VOLUME
3. PROVIDE CABLE OPERATED DAMPERS YOUNG REGULATOR MODEL 800AM FOR AIR OUTLETS IN SHEETROCK OR
4. PROVIDE EXHAUST GRILLES WITH BACKDRAFT

AIR DOOR SCHEDULE

DESIG.	LOCATION	FAN				ELECTRICAL MOTORS & UNIT			WEIGHT (LBS)	MANUF. MODEL NO.	REMARKS
		AIR VOLUME CFM	MAX FPM @ NOZZLE	HP	ΔT (°F)	V/PH/HZ	MCA	MOP			
AD-1	ENTRANCE	2,072	3,600	2@1/2	-	208/3/60	1.7	15	64	BERNER AE10-E-2072A	SEE NOTES BELOW
AD-2	ENTRANCE	2,072	3,600	2@1/2	-	208/3/60	1.7	15	64	BERNER AE10-E-2072A	SEE NOTES BELOW

NOTES:

1. PROVIDE WITH DOOR SWITCH.
2. PROVIDE WITH HANGING

FAN SCHEDULE

DESIG.	C.F.M.	S.P. (IN. WG)	FAN SPEED (RPM)	MOTOR POWER(HP)	ELECTRICAL		SONES	WEIGHT (LBS.)	MANUF.	MODEL No.	REMARKS
					V/Ø/Hz	FLA					
~~TX-1~~	~~150~~	~~0.517~~	~~1200~~	~~0.18~~	~~115/1/60~~	~~1.9~~	~~10.1~~	~~64~~	~~CAPTIVEAIRE~~	~~SIF10-DD~~	~~1 2 3 4~~ 6
GX-1	1100	1.0	1738	3/4	115/1/60	8.9	13.9	131	CAPTIVEAIRE	SIF11-DD	1 2 3 4

NOTES :

1. PROVIDE WITH DISCONNECT SWITCH.
2. COORDINATE INSTALLATION WITH FIELD CONDITIONS.
3. PROVIDE WITH VIBRATION ISOLATORS.
4. PROVIDE WITH BACKDRAFT DAMPER
5. TENANT SHALL INSTALL AN INDICATOR PILOT LAMP 12" ABOVE THERMOSTAT FOR THE PURPOSE OF VERIFYING EXHAUST FAN OPERATION.

ROOFTOP HEAT PUMP UNIT SCHEDULE

DESIG.	FAN DATA				COOLING DATA					HEATING DATA		ELECTRICAL DATA			NET WEIGHT (LBS)	EER	MANUF. & MODEL NUMBER	REMARKS
	TOTAL (CFM)	E.S.P (IN.WC)	OUTSIDE AIR (CFM)	MOTOR HP	REFRIG. TYPE	TTL (MBH)	AMBIENT TEMP (°F)	E.A.T D.B/W.B(F°)	L.A.T D.B(F°)	TTL (MBH)	HEATING DELTA T	V/Ø/Hz	MCA	MOCP MFS				
RTU-1	3,400	1	585	3.1	R-410A	117.24	95	80/67	57.9	121.5	38.77	208/3/60	54	70	1,201	11.0	TRANE YSJ150A3S0L	SEE NOTES BELOW
RTU-2	4,000	1	685	4.7	R-410A	143.45	95	80/67	57.6	121.5	32.96	208/3/60	64	90	1,500	10.8	TRANE YSJ120A3S0L	SEE NOTES BELOW

NOTES:

1. CONTRACTOR TO COORDINATE UNIT CONFIGURATION WITH FIELD CONDITIONS AND MANUFACTURER'S RECOMMENDED CLEARANCE REQUIREMENTS.
2. PROVIDE ROOF CURB. COORDINATE WITH STRUCTURAL ENGINEER.
3. PROVIDE DISCONNECT SWITCH.
4. PROVIDE WITH FLEXIBLE DUCT CONNECTIONS AT THE INLET AND OUTLET.
5. PROVIDE UNIT WITH ECONOMIZER HOOD OPTION WITH RELIEF AND ASSOCIATED DAMPERS/CONTROLS.
6. PROVIDE UNIT WITH BAROMETRIC RELIEF HOOD OPTION.
7. PROVIDE DUCT SMOKE DETECTOR IN SUPPLY AND RETURN AIR DUCT.
8. PROVIDE 7 DAY PROGRAMMABLE THERMOSTAT.
9. PROVIDE UNIT WITH CONDENSATE OVERFLOW SENSOR.
10. PROVIDE WITH MERV 13 FILTERS.
11. PROVIDE WITH VFD FAN MOTORS.

OUTDOOR AIR CALCULATIONS

ROOM DESIGNATION	CLASSIFICATION	AREA (SF)	NR. OF FIXTURES	DEFAULT OCCUPANCY (PPL/1000 SF)	OCCUPANCY BY AREA	AIR RATE			VENTIALTION REQUIRED			VENTILATION REQUIRED CFM	VENTILATION PROVIDED CFM
						CFM/SF	CFM/PERSON	CFM/FIXTURE	OCCUPANCY	AREA	FIXTURES		
BOH KITCHEN, PREP, WORK AREA	RESTAURANT - KITCHEN	1271	-	20	26	0.12 IN -0.7 EX	7.5	-	195	152 IN -889 EX	-	347 IN -889 EX	350 IN 1100 EX
DINING	RETAIL STORES - SALES	1190	-	70	84	0.18	7.5	-	630	214	-	844	850
RESTROOMS	RETSROOMS	94	2	-	-	-	-	-70	-	-	-140	-140	-150
OPERATION OFFICE	OFFICE SPACES	61	-	5	1	0.06	5	-	5	3	-	8	10
STORAGE	STORAGE	858	-	-	-	0.06	-	-	-	52	-	52	60

NOTES:

BASED ON TABLE 403.3 - MINIMUM VENTILATION RATES OF FL MECHANICAL CODE

ELECTRIC DUCT HEATER

DESIG.	HEATER TYPE	MANUF.	KW	DUCT DIMENSIONS	SUPPLY LINE		CONTROL OPTION	CFM TREATED	REMARKS
					VOLTS	PHASE			
EDH-1	QUZ	INDEECO	22	20" x 20"	208	3	SCR	3,400	SEE NOTES BELOW
EDH-2	QUZ	INDEECO	38	24" x 24"	208	3	SCR	4,000	SEE NOTES BELOW

NOTES:

1. PROVIDE AIRFLOW SWITCH.
2. PROVIDE DISCONNECT SWITCH.
3. DUCT HEATER SHALL BE LOCATED NO CLOSER THAN 4 FT. DOWNSTREAM OR 2 FT. UPSTREAM FROM FAN OUTLET, ELBOW, ETC.
4. PROVIDE 2-STAGE HEATING.

Air System Sizing Summary for BLOCK LOAD

Project Name: 21.091.00 - Sweetgreen-St. Petersburg, FL — 11/18/2021
Prepared by: Fiskaa — 05:22PM

Air System Information
- Air System Name: BLOCK LOAD
- Equipment Class: PKG ROOF
- Air System Type: 2DMZ
- Number of zones: 1
- Floor Area: 3303.0 ft²
- Location: Tampa, Florida

Sizing Calculation Information
- Calculation Months: Jan to Dec
- Sizing Data: Calculated
- Zone CFM Sizing: Sum of space airflow rates
- Space CFM Sizing: Individual peak space loads

Central Cooling Coil Sizing Data

Total coil load	19.9	Tons	Load occurs at	Jul 1500
Total coil load	238.4	MBH	OA DB / WB	92.0 / 77.0 °F
Sensible coil load	172.4	MBH	Entering DB / WB	79.0 / 66.0 °F
Coil CFM at Jul 1500	6949	CFM	Leaving DB / WB	55.0 / 53.9 °F
Max block CFM at Jul 1400	7009	CFM	Coil ADP	52.3 °F
Sum of peak zone CFM	7009	CFM	Bypass Factor	0.100
Sensible heat ratio	0.723		Resulting RH	49 %
CFM/Ton	334.7		Design supply temp	55.0 °F
ft²/Ton	166.3		Zone T-stat Check	1 of 1 OK
BTU/(hr·ft²)	72.2		Max zone temperature deviation	0.0 °F
Water flow @ 10.0 °F rise	N/A			

Central Heating Coil Sizing Data

Max coil load	129.3	MBH	Load occurs at	Des Htg
Coil CFM at Des Htg	3846	CFM	BTU/(hr·ft²)	39.1
Max coil CFM	3846	CFM	Ent. DB / Lvg DB	63.9 / 95.0 °F
Water flow @ 20.0 °F drop	N/A			

Supply Fan Sizing Data

Actual max CFM at Jul 1400	7009	CFM	Fan motor BHP	0.00 BHP
Standard CFM	7006	CFM	Fan motor kW	0.00 kW
Actual max CFM/ft²	2.12	CFM/ft²	Fan static	0.00 in wg

Outdoor Ventilation Air Data

Design airflow CFM	1193	CFM	CFM/person	11.25 CFM/person
CFM/ft²	0.36	CFM/ft²		

Hourly Analysis Program 5.10 — Page 1 of 4

Air System Design Load Summary for BLOCK LOAD

Project Name: 21.091.00 - Sweetgreen-St. Petersburg, FL — 11/18/2021
Prepared by: Fiskaa — 05:22PM

	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jul 1500			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 92.0 °F / 77.0 °F			HEATING OA DB / WB 36.0 °F / 30.3 °F		
ZONE LOADS	Details	Sensible (BTU/hr)	Latent (BTU/hr)	Details	Sensible (BTU/hr)	Latent (BTU/hr)
Window & Skylight Solar Loads	325 ft²	6531	-	325 ft²	-	-
Wall Transmission	2238 ft²	9469	-	2238 ft²	17151	-
Roof Transmission	3303 ft²	26627	-	3303 ft²	13539	-
Window Transmission	325 ft²	5010	-	325 ft²	11901	-
Skylight Transmission	0 ft²	0	-	0 ft²	0	-
Door Loads	98 ft²	2291	-	98 ft²	1714	-
Floor Transmission	1628 ft²	0	-	1628 ft²	0	-
Partitions	0 ft²	0	-	0 ft²	0	-
Ceiling	0 ft²	0	-	0 ft²	0	-
Overhead Lighting	5450 W	18595	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	10850 W	37020	-	0	0	-
People	106	25410	15890	0	0	0
Infiltration	-	4732	8688	-	9465	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	10% / 5%	13568	1229	5%	2688	0
>> Total Zone Loads	-	149253	25807	-	56458	0
Zone Conditioning	-	145979	25807	-	55753	0
Plenum Wall Load	0%	0	-	0	0	-
Plenum Roof Load	0%	0	-	0	0	-
Plenum Lighting Load	0%	0	-	0	0	-
Return Fan Load	7009 CFM	0	-	7009 CFM	0	-
Ventilation Load	1193 CFM	20162	40199	1193 CFM	43254	0
Supply Fan Load	7009 CFM	0	-	7009 CFM	0	-
Space Fan Coil Fans	-	0	-	-	0	-
Duct Heat Gain / Loss	0%	0	-	0%	0	-
>> Total System Loads	-	166141	66006	-	99007	0
Central Cooling Coil	-	172352	66008	-	-30272	0
Central Heating Coil	-	-6211	-	-	129279	-
>> Total Conditioning	-	166141	66008	-	99007	0
Key:	Positive values are clg loads Negative values are htg loads			Positive values are htg loads Negative values are clg loads		

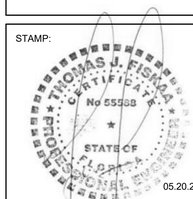
Hourly Analysis Program 5.10 — Page 4 of 4

sweetgreen
3101 W. EXPOSITION BLVD.
LOS ANGELES, CALIFORNIA 90018

THESE DRAWINGS & SPECIFICATIONS ARE CONFIDENTIAL AND SHALL REMAIN THE SOLE PROPERTY OF SWEETGREEN CORPORATION. THEY SHALL NOT BE REPRODUCED (IN WHOLE OR IN PART), SHARED WITH THIRD PARTIES OR USED IN ANY MANNER ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF SWEETGREEN CORPORATION. THESE DRAWINGS & SPECIFICATIONS ARE INTENDED TO EXPRESS DESIGN INTENT FOR A PROTOTYPICAL SWEETGREEN STORE (WHICH IS SUBJECT TO CHANGE AT ANY TIME) AND MAY NOT REFLECT ACTUAL SITE CONDITIONS. NEITHER PARTY SHALL HAVE ANY OBLIGATION NOR LIABILITY TO THE OTHER (EXCEPT AS STATED ABOVE) UNTIL A WRITTEN AGREEMENT IS FULLY EXECUTED.

ARCHITECT OF RECORD:
O'NEIL LANGAN
ARCHITECTS
15 WEST 37TH STREET
15TH FLOOR
NEW YORK, NY 10018
PHONE: 212-279-2670
FAX: 212-279-2671

STAMP:



05.20.2024

THIS ITEM HAS BEEN ELECTRONICALLY SIGN AND SEALED BY THOMAS J FISKAA ON 5/20/24 USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT INFORMATION:
EDGE DISTRICT

PROJECT INFORMATION:
1114 CENTRAL AVENUE
ST PETERSBURG, FL 33705

DRAWN BY:	DL
CHECKED BY:	PP
PROJECT MANAGER:	DL
SG DESIGN MANAGER:	-
SG CONSTR. MANAGER:	-
PROJECT NO:	21.091.00
TEMPLATE VERSION:	06.01.2020

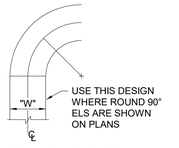
REVISIONS

REV.	DATE	DESCRIPTION
	12.17.2021	PERMIT SET
1	06.03.2022	REV 02
2	06.24.2022	REV 03
6	05.20.2024	PERMIT REV2

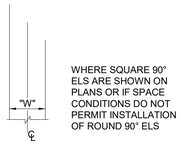
H.V.A.C. SCHEDULES

M-600

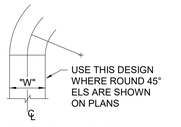
5/22/2024 8:57:30 AM



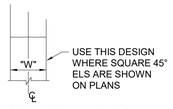
ROUND 90° ELBOW



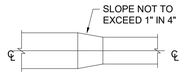
SQUARE 90° ELBOW



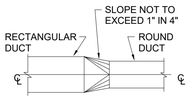
ROUND 45° ELBOW



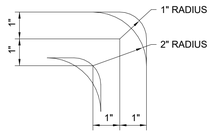
SQUARE 45° ELBOW



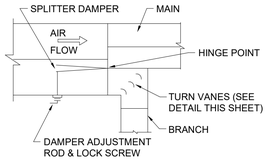
TYPICAL RECTANGULAR TRANSITION



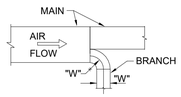
TYPICAL RECTANGULAR TO ROUND TRANSITION



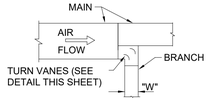
DETAIL OF TURNING VANES



TYPICAL SPLITTER DAMPER



ROUND BRANCH TAKEOFF

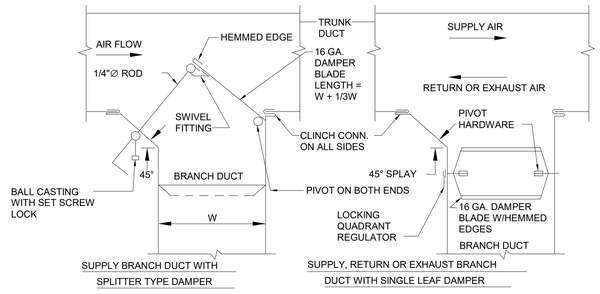


SQUARE BRANCH TAKEOFF

CONSTRUCTION OF BRANCH TAKEOFF FROM MAIN

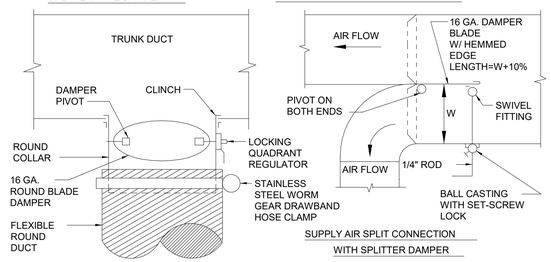
INSTALLATION NOTES

1. ALL DUCTS SHALL BE CONSTRUCTED AND ERECTED IN A NEAT AND WORKMANLIKE MANNER.
2. DUCTS SHALL BE CONSTRUCTED OF THE WEIGHTS GAGES AND MATERIAL SHOWN IN THE SPECIFICATIONS ON THESE DRAWINGS.
3. THE DIMENSIONS SHOWN FOR ALL DUCTS SHOWN IN PLAN GIVE THE WIDTH FIRST AND THEN THE HEIGHT.
4. DUCT RISERS SHOULD BE SUPPORTED BY ANGLES AT EVERY FLOOR.
5. AIR TURN VANES SHALL BE INSTALLED IN ALL ABRUPT ELBOWS TO PREVENT TURBULANCE.
6. DUCTS SHALL BE SECURELY ATTACHED TO THE BUILDING CONSTRUCTION IN AN APPROVED MANNER.
7. DIVERTING TRANSITION PIECES SHALL BE MADE AS GRADUAL AS POSSIBLE.
8. INSTALL PIPE DAMPER AS REQUIRED BY N.F.P.A. PAMPHLET No.90A OR THE LOCAL CODES.
9. ACCESS PANELS SHOULD BE PLACED BEFORE AND/OR AFTER EQUIPMENT INSTALLED IN THE DUCT.
10. WHEN OBSTRUCTION CANNOT BE AVOIDED DUCT AREA SHOULD NOT BE DECREASED MORE THAN 10 PERCEN, AND A STREAMLINED FITTING SHOULD BE USED.
11. FLEXIBLE CONNECTIONS SHOULD BE USED ON BOTH THE INLET AND OUTLET TO ALL FANS.
12. JOINTS AND SEAMS OF SUPPLY DUCTS SHALL BE FASTENED SECURELY AND MADE AIR TIGHT.



SUPPLY BRANCH DUCT WITH SPLITTER TYPE DAMPER

SUPPLY, RETURN OR EXHAUST BRANCH DUCT WITH SINGLE LEAF DAMPER



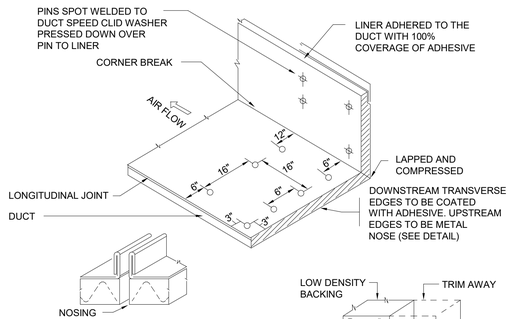
SUPPLY AIR ROUND DUCT BRANCH WITH SINGLE LEAF DAMPER

SUPPLY AIR SPLIT CONNECTION WITH SPLITTER DAMPER

NOTES:
1. PROVIDE ALL BRANCH DUCTS WITH MANUALLY OPERATED VOLUME DAMPERS FOR BALANCING AIR SYSTEMS. THESE DAMPERS SHALL BE INDEPENDENT OF DAMPERS FURNISHED WITH DIFFUSERS AND REGISTERS, WHICH SHALL ONLY BE UTILIZED FOR TRIM BALANCING WITHOUT GENERATING NOISE.
2. FOR DUCTS WIDER THAN 48" USE MULTIPLE SINGLE LEAF DAMPERS OR OPPOSED-ACTION MULTI-BLADE DAMPERS; EACH WITH LOCKING QUADRANT REGULATOR.

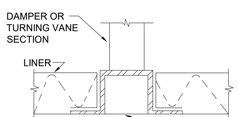
LOW VELOCITY DUCT LAYOUT DETAILS

SCALE: NONE



NOTE:
ENTERING, BUTTING & TRAILING EDGES OF LINER AT TRANSVERSE JOINTS TO BE COVERED BY NOSING

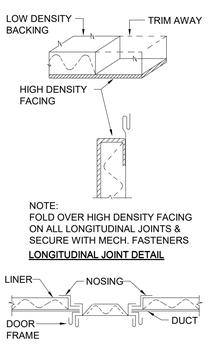
TRANSVERSE JOINT DETAIL



NOTE:
HAT SECTION INSTALLED WITH NOSING TO CONCEAL LINER EDGES.

DETAIL AT DAMPERS AND TURNING VANES

GENERAL NOTES:
1. NOSING ATTACHED TO DUCT BY RIVETS,SCREWS OR WELDS.
2. NOSING : 24 GA. UP TO 48", OVER 48", SAME GA. AS DUCT



NOTE:
FOLD OVER HIGH DENSITY FACING ON ALL LONGITUDINAL JOINTS & SECURE WITH MECH. FASTENERS

LONGITUDINAL JOINT DETAIL

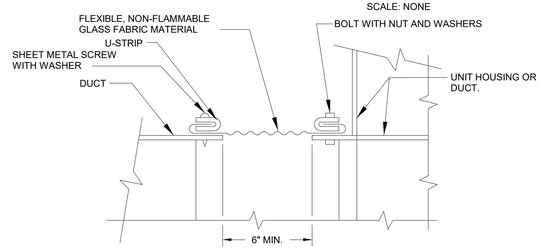
ACCESS DOOR NOSING DETAIL

ACOUSTICAL DUCT LINER DETAIL

SCALE: NONE

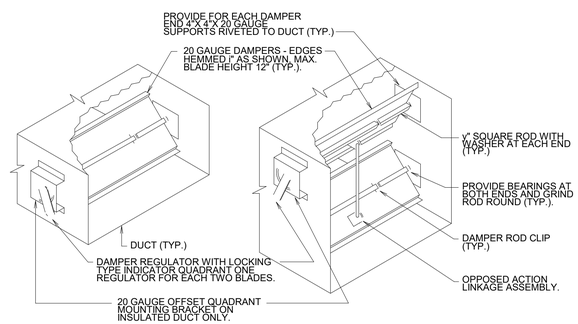
BRANCH DUCT VOLUME DAMPERS

SCALE: NONE



FLEXIBLE CONNECTION DETAIL

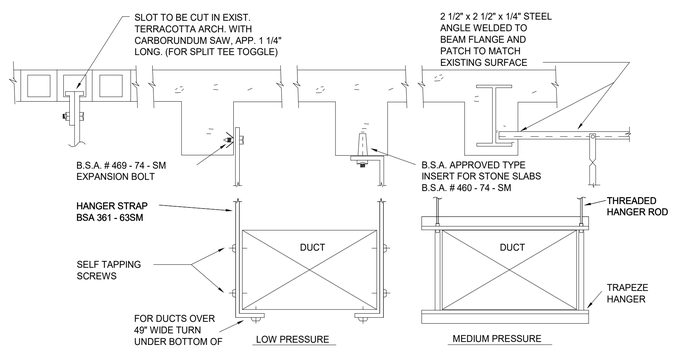
SCALE: NONE REFERENCE #: M100.0017



NOTES:
1. USE SINGLE BLADE FOR DUCTS UP TO 12" HIGH AND LESS THAN 29" WIDE.
2. USE MULTIPLE BLADES FOR DUCTS GREATER THAN OR EQUAL TO 29" AND/OR OVER 12" HIGH.

LOW PRESSURE BALANCING DAMPER

SCALE: NONE



NOTE: DAMAGED OR REMOVED FIREPROOFING SHALL BE REPAIRED.

METHOD OF HANGING DUCTWORK

SCALE: NONE

sg

sweetgreen

3101 W. EXPOSITION BLVD.
LOS ANGELES, CALIFORNIA 90018

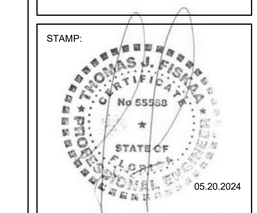
THESE DRAWINGS & SPECIFICATIONS ARE CONFIDENTIAL AND SHALL REMAIN THE SOLE PROPERTY OF SWEETGREEN CORPORATION. THEY SHALL NOT BE REPRODUCED (IN WHOLE OR IN PART), SHARED WITH THIRD PARTIES OR USED IN ANY MANNER ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF SWEETGREEN CORPORATION. THESE DRAWINGS & SPECIFICATIONS ARE INTENDED TO EXPRESS DESIGN INTENT FOR A PROTOTYPICAL SWEETGREEN STORE (WHICH IS SUBJECT TO CHANGE AT ANY TIME) AND MAY NOT REFLECT ACTUAL SITE CONDITIONS. NEITHER PARTY SHALL HAVE ANY OBLIGATION NOR LIABILITY TO THE OTHER (EXCEPT AS STATED ABOVE) UNTIL A WRITTEN AGREEMENT IS FULLY EXECUTED.

ARCHITECT OF RECORD:

O'NEIL LANGAN
ARCHITECTS

15 WEST 37TH STREET
15TH FLOOR
NEW YORK, NY 10018
PHONE: 212-279-2670
FAX: 212-279-2671

STAMP:



05.20.2024

THIS ITEM HAS BEEN ELECTRONICALLY SIGN AND SEALED BY THOMAS J FISKAA ON 5/20/24 USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT INFORMATION:
EDGE DISTRICT

PROJECT INFORMATION:
1114 CENTRAL AVENUE
ST PETERSBURG, FL 33705

DRAWN BY:	DL
CHECKED BY:	PP
PROJECT MANAGER:	DL
SG DESIGN MANAGER:	-
SG CONSTR. MANAGER:	-
PROJECT NO:	21.091.00
TEMPLATE VERSION:	06.01.2020

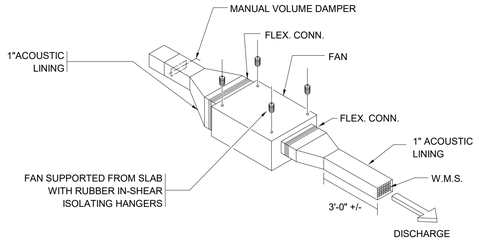
REVISIONS

REV.	DATE	DESCRIPTION
	12.17.2021	PERMIT SET
1	06.03.2022	REV 02
2	06.24.2022	REV 03
6	05.20.2024	PERMIT REV2

H.V.A.C. DETAILS SHEET 1 OF 2

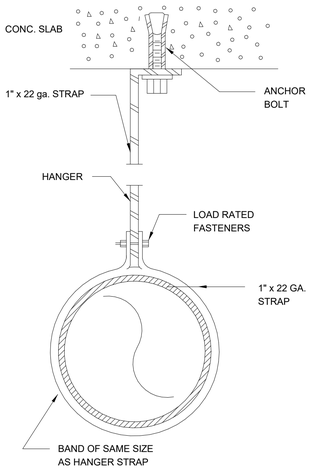
M-700

5/22/2024 8:57:33 AM



INLINE FAN HANGING SUPPORT DETAIL

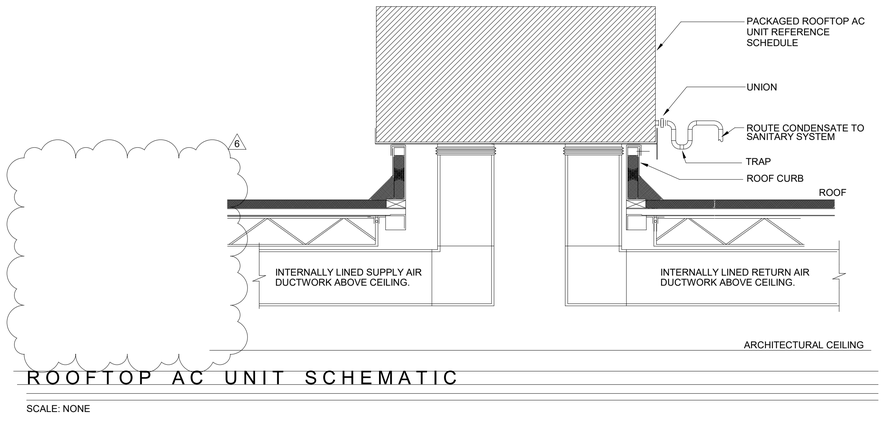
SCALE: NONE REFERENCE #: M400.013



MINIMUM HANGER SIZES TABLE		
DIA.	MAXIMUM SPACING	STRAP
10" AND UNDER	12'	1" x 22 GA.
11-18"	12'	1" x 22 GA.
19-24"	12'	1" x 22 GA.
25-36"	12'	1" x 20 GA.
37-50"	12'	TWO 1" x 20 GA.
51-60"	12'	TWO 1" x 18 GA.
61-84"	12'	TWO 1" x 18 GA.

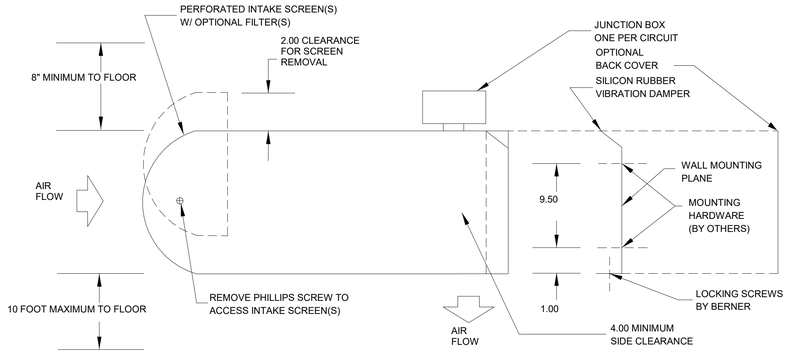
TYPICAL ROUND DUCT HANGER

SCALE: NONE REFERENCE #: M100.057



ROOFTOP AC UNIT SCHEMATIC

SCALE: NONE

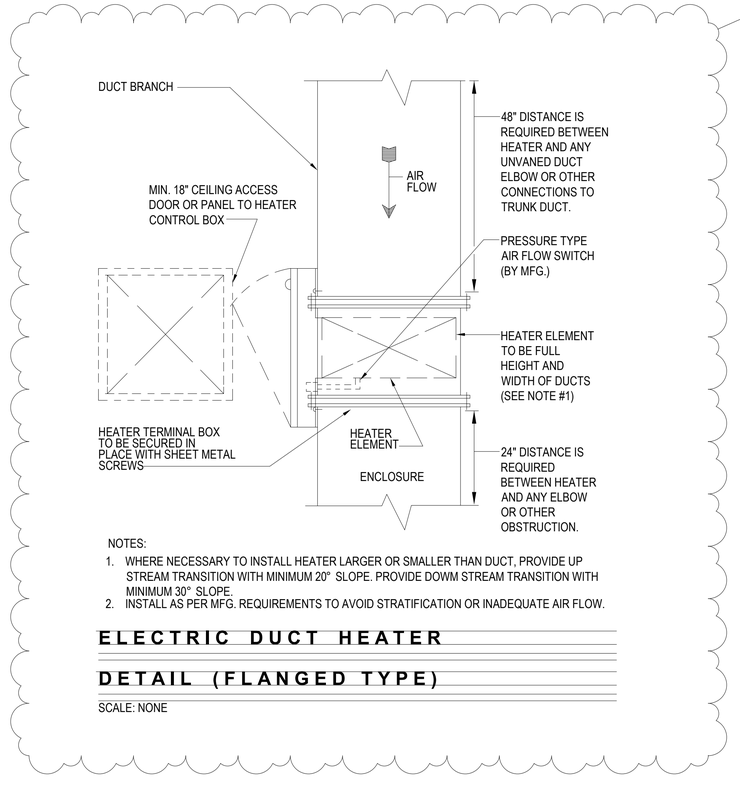


NOTES:

1. AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20 DEGREES TO EITHER SIDE OF CL.
2. ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
3. FIELD VERIFY DIMENSIONS.
4. ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
5. ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL ENGINEER.
6. DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.

AIR DOOR DETAIL

SCALE: NONE



NOTES:

1. WHERE NECESSARY TO INSTALL HEATER LARGER OR SMALLER THAN DUCT, PROVIDE UP STREAM TRANSITION WITH MINIMUM 20° SLOPE. PROVIDE DOWM STREAM TRANSITION WITH MINIMUM 30° SLOPE.
2. INSTALL AS PER MFG. REQUIREMENTS TO AVOID STRATIFICATION OR INADEQUATE AIR FLOW.

ELECTRIC DUCT HEATER DETAIL (FLANGED TYPE)

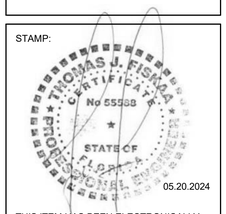
SCALE: NONE

sweetgreen
3101 W. EXPOSITION BLVD.
LOS ANGELES, CALIFORNIA 90018

THESE DRAWINGS & SPECIFICATIONS ARE CONFIDENTIAL AND SHALL REMAIN THE SOLE PROPERTY OF SWEETGREEN CORPORATION. THEY SHALL NOT BE REPRODUCED (IN WHOLE OR IN PART), SHARED WITH THIRD PARTIES OR USED IN ANY MANNER ON OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT WITHOUT THE PRIOR WRITTEN CONSENT OF SWEETGREEN CORPORATION. THESE DRAWINGS & SPECIFICATIONS ARE INTENDED TO EXPRESS DESIGN INTENT FOR A PROTOTYPICAL SWEETGREEN STORE (WHICH IS SUBJECT TO CHANGE AT ANY TIME) AND MAY NOT REFLECT ACTUAL SITE CONDITIONS. NEITHER PARTY SHALL HAVE ANY OBLIGATION NOR LIABILITY TO THE OTHER (EXCEPT AS STATED ABOVE) UNTIL A WRITTEN AGREEMENT IS FULLY EXECUTED.

ARCHITECT OF RECORD:
O'NEIL LANGAN
ARCHITECTS
15 WEST 37TH STREET
15TH FLOOR
NEW YORK, NY 10018
PHONE: 212-279-2670
FAX: 212-279-2671

STAMP:



05.20.2024

THIS ITEM HAS BEEN ELECTRONICALLY SIGN AND SEALED BY THOMAS J FISKAA ON 5/20/24 USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT INFORMATION:
EDGE DISTRICT

PROJECT INFORMATION:
1114 CENTRAL AVENUE ST PETERSBURG, FL 33705

DRAWN BY:	DL
CHECKED BY:	PP
PROJECT MANAGER:	DL
SG DESIGN MANAGER:	-
SG CONSTR. MANAGER:	-
PROJECT NO:	21.091.00
TEMPLATE VERSION:	06.01.2020

REVISIONS

REV.	DATE	DESCRIPTION
	12.17.2021	PERMIT SET
1	06.03.2022	REV 02
2	06.24.2022	REV 03
6	05.20.2024	PERMIT REV2

H.V.A.C. DETAILS SHEET 2 OF 2

M-701

5/22/2024 8:57:34 AM