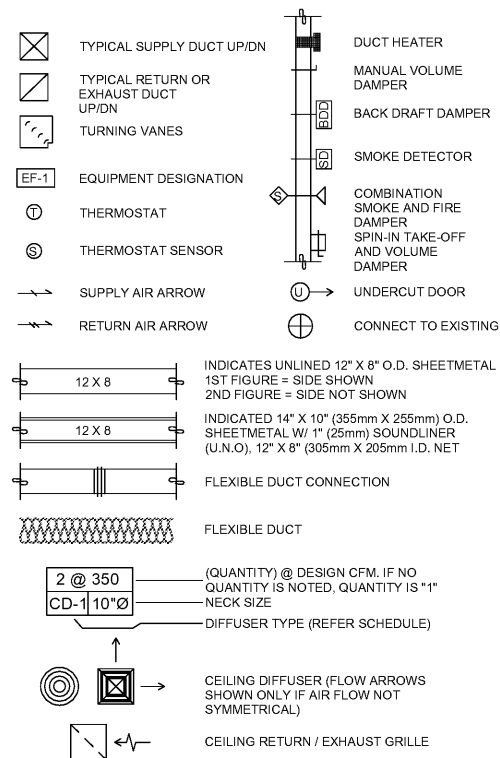


## ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITIES HAVING JURISDICTION
APPROX	APPROXIMATE
BLDG	BUILDING
CO2	CARBON DIOXIDE
CD	CEILING DIFFUSER
CLG	CEILING
CONST	CONSTRUCTION
CXA	COMMISSIONING AGENT
DEG	DEGREES
DM	STARBUCKS DESIGN MANAGER
DN	DOWN
DTL	DETAIL
DWG(S)	DRAWING(S)
EA	EACH
EC	ELECTRICAL CONTRACTOR
ECP	EQUIPMENT CONTROL PAC
EG	EXHAUST GRILLE
ELEC	ELECTRICAL
EM	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
EXIST	EXISTING
EXT	EXTERIOR
F&I	FURNISH & INSTALL
FOIC	FURNISHED BY OWNER, INSTALLED BY CONTRACTOR
FOIO	FURNISHED BY OWNER, INSTALLED BY OWNER
FLR	FLOOR
FT	FOOT/FEET
G	GAS PIPING
GC	GENERAL CONTRACTOR
HR	HEATING, VENTILATION, AIR CONDITIONING
HVAC	HEATING, VENTILATION, AIR CONDITIONING
I.D.	INSIDE DIAMETER
IAQ	INDOOR AIR QUALITY
LCP	LIGHTING CONTROL PANEL
LL	LANDLORD
LV	LOW VOLTAGE
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL AND PLUMBING
MFG	MANUFACTURER
MIN	MINIMUM
NTS	NOT TO SCALE
O.D.	OUTSIDE DIMENSION
OSA	OUTSIDE AIR
REF	REFERENCE
REQ'D	REQUIRED
REV	REVISION
RT	ROOFTOP
SF	SQUARE FEET
SHT	SHEET
SPECS	SPECIFICATION(S)
SST	STAINLESS STEEL
TEMP	TEMPORARY
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UC	UNDER COUNTER
WH	WATER HEATER
WSHP	WATER SOURCE HEAT PUMP

WORK DESCRIPTION	RESPONSIBILITY	
	LANDLORD	STARBUCKS
HVAC UNITS, CURB AND STRUCTURAL	X	
HVAC UNIT ECONOMIZERS AND RELIEF	X	
SMOKE DETECTORS IN DUCTWORK AND INTERLOCK	X	
THERMOSTATS AND CONTROLS	X	X
EMS CONTROLS		X
MOTORIZED DAMPERS FOR BACKDRAFT	X	
EXHAUST FAN, CURB AND MOTORIZED DAMPER	X	
DUCTWORK 12" OR LARGER		X
DUCTWORK 10" OR SMALLER		X
DAMPERS FOR CONNECTIONS		X
GAS SERVICE AND METER	N/A	N/A
GAS PIPING TO SPACE	N/A	N/A
GAS PIPING TO HOT WATER TANK	N/A	N/A
GAS PIPING TO HVAC UNITS	N/A	N/A
LOUVERS FOR INTAKES, EXHAUST AND PRESSURE RELIEF	N/A	N/A

## MECHANICAL SYMBOL LEGEND



## CONTROLS AND OPERATION NOTES

THE GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL THE FOLLOWING COMPONENTS:

**CONTROL WIRING**  
THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL CONTROL WIRING IN CONDUIT NECESSARY FOR THE COMPLETE AND PROPER OPERATING TEMPERATURE CONTROL SYSTEM INCLUDING ALL MODES OF OPERATION AND INTERLOCK.

**EXHAUST FANS**  
RESTROOM EXHAUST FAN(S) TO BE OPERATED IN CONJUNCTION WITH STORE HOURS UNLESS OTHERWISE NOTED OR APPROVED OR AS REQUIRED BY JURISDICTION. (COORDINATE WITH ELECTRICAL).

**THERMOSTAT**  
PERMANENT THERMOSTAT(S) AND REMOTE SENSOR(S) SHALL BE FURNISHED AND INSTALLED. ONE THERMOSTAT AND SENSOR IS PROVIDED FOR EACH AIR HANDLING UNIT. MOUNT THERMOSTAT(S) AND SENSOR(S) IN LOCATION & HEIGHT AS INCUBATED ON DRAWINGS. MECHANICAL CONTRACTOR TO PROVIDE THERMOSTAT IDENTIFICATION LABELS PER SPECIFICATION REQUIREMENTS. REFER TO THERMOSTAT SETUP INSTRUCTIONS BELOW FOR ADDITIONAL REQUIREMENTS.

**THERMOSTAT SETUP INSTRUCTIONS**  
PROVIDE THE FOLLOWING SETUP AND PROGRAMMING:  
1. CONFIGURE AS FOLLOWS:  
A. DEGREES "F" DISPLAY  
B. 12 HOUR CLOCK  
C. CONTINUOUS FAN OPERATION IN OCCUPIED MODE  
D. DISABLE KEYBOARD PROGRAMMING  
2. SET TIME AND DATE.  
3. SET TO DISPLAY CURRENT TEMPERATURE.  
4. SET OCCUPIED START TIME AT 30 MIN. BEFORE OPENING. SET UNOCCUPIED START TIME AT 30 MIN. AFTER CLOSING. VERIFY HOURS WITH STORE MANAGER OR CONSTRUCTION MANAGER.  
5. SET POINTS SHALL BE AS FOLLOWS OR AS APPROPRIATE FOR CLIMATE:  
A. OCCUPIED (5° F DEADBAND) (3° C DEADBAND)  
HEATING: 68° F (20° C)  
COOLING: 75° F (24° C)  
B. UNOCCUPIED  
HEATING: 60° F (15° C)  
COOLING: 78° F (25° C)  
6. SET TWO (2) FAN OVERRIDE FUNCTION TO PROVIDE THE FOLLOWING SET POINT OVERRIDES:  
A. HEATING: 2° F (1° C)  
B. COOLING: -2° F (1° C)

## ENERGY MANAGEMENT SYSTEM (EMS)

THE GENERAL CONTRACTOR SHALL INSTALL (OR DEMO AND REINSTALL FOR RENOVATIONS) THE VENSTAR SURVEYOR EMS SYSTEMS PRIOR TO THE LAST WEEK OF CONSTRUCTION. GENERAL CONTRACTOR TO PROVIDE ONE PERMANENT THERMOSTAT AND REMOTE SENSOR PER HVAC UNIT. LOCATE AND MOUNT THERMOSTAT(S) AND SENSOR(S) PER THE DRAWINGS. PROVIDE THERMOSTAT IDENTIFICATION LABELS PER SPECIFICATION REQUIREMENTS.

GENERAL CONTRACTOR TO PROGRAM, START-UP AND COMMISSION THE CONTROL SYSTEM. GENERAL CONTRACTOR IS TO COMPLETE FINAL CONNECTION AFTER DATA RACK AND NETWORK INSTALLATIONS. GENERAL CONTRACTOR VENDOR TO VERIFY SYSTEM OPERATION AND TROUBLESHOOT IF REQUIRED. GENERAL CONTRACTOR TO COMPLETE SURVEYOR'S STARBUCKS INSTALLATION SURVEY FORM AND PROVIDE TWO (2) COMPLETED COPIES OF THIS DOCUMENT TO THE CONSTRUCTION MANAGER AND COMMISSIONING AGENT PRIOR TO FINAL PAYMENT.

## DUCTWORK AND ACCESSORIES

**SHEET METAL DUCTWORK** SEE SPECIFICATIONS FOR SHEET METAL DUCT REQUIREMENTS. ALL EXPOSED DUCTWORK TO BE SPIRAL ROUND, OR RECTANGULAR LOCK-SEAM TYPE, AS SHOWN ON HVAC PLAN SHEET. ASSEMBLE AND INSTALL DUCTWORK IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICE FOR ACHIEVING AIR TIGHT (5% LEAKAGE) AND NOISELESS (NO OBJECTIONABLE NOISE) SYSTEMS, CAPABLE OF PERFORMING EACH INDICATED SERVICE. FURNISH AND INSTALL ALL REQUIRED DAMPERS, TRANSITIONS, CONNECTIONS TO AIR TERMINALS, AND OTHER ACCESSORIES NECESSARY FOR COMPLETE OPERATING SYSTEM. NO VARIATION OF DUCT CONFIGURATION OR SIZES WILL BE PERMITTED EXCEPT BY PERMISSION FROM THE ENGINEER.

**DUCT SEALANT** SEAL ALL LONGITUDINAL AND TRANSVERSE JOINTS PER SPECIFICATIONS. COVER ALL FIELD JOINTS, JOINTS AROUND SPIN-IN FITTINGS, AND FASTENING SCREWS WITH MASTIC.

**SUPPORTS** PROVIDE FASTENERS, ANCHORS, RODS, STRAPS, TRIM, AND ANGLES FOR SUPPORT OF DUCTWORK. SUPPORTS MUST COMPLY WITH LOCAL REGULATIONS AND CODE.

**DAMPERS** PROVIDE VOLUME CONTROL DAMPERS WHERE INDICATED ON DRAWINGS AND AT POINTS ON LOW PRESSURE SUPPLY, RETURN, AND EXHAUST DUCTS WHERE BRANCHES ARE TAKEN FROM LARGER DUCTS. PROVIDE UL LISTED FIRE OR FIRE/SMOKE DAMPERS WHERE REQUIRED AND IN ACCORDANCE WITH NFPA AND LOCAL CODES. PROVIDE CONVENIENTLY LOCATED ACCESS DOORS OF AMPLIFIED SIZE AND QUANTITY FOR SERVICING THE DAMPERS. PROVIDE MOTORIZED DAMPERS AT ALL INTAKE & EXHAUST BUILDING OPENINGS. COORDINATE WITH OTHER TRADES FOR ACCESS PANELS, POWER AND FIRE ALARM INTERFACES. SEE PROJECT MANUAL.

**GRILLES, REGISTERS, AND DIFFUSERS** GRILLES, REGISTERS, AND DIFFUSERS SHALL BE AS SPECIFIED AND SHALL BE MECHANICAL CONTRACTOR SUPPLIED, UNLESS OTHERWISE NOTED. DIFFUSERS SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS AND SCHEDULES. THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS ITEMS NECESSARY FOR A COMPLETE AND PROPER INSTALLATION IN THE TYPE OF CEILING AND WALLS USED IN THIS PROJECT.

**THERMAL INSULATION** PROVIDE EXTERNAL THERMAL INSULATION WITH AN INTEGRAL VAPOR BARRIER FACING OF SUFFICIENT THICKNESS TO MEET LOCAL ENERGY CODE REQUIREMENTS OR ASHRAE 90.1-2004, WHICHEVER IS MORE STRINGENT. PROVIDE INSULATION ON EXHAUST AND OUTSIDE AIR DUCTS, AND ON CONCEALED PORTIONS OF SUPPLY AND RETURN AIR DUCTS. DO NOT EXTERNALLY INSULATE EXPOSED DUCTWORK AND PORTIONS OF DUCTWORK THAT ARE INTERNALLY LINED WITH CODE REQUIRED THICKNESS. INTERNALLY INSULATE EXPOSED SUPPLY DUCTWORK IF POSSIBILITY OF CONDENSATION. INTERNALLY INSULATE EXTERIOR DUCTWORK PER CODE.

**ACOUSTICAL DUCT LINER** UNLESS OTHERWISE INDICATED ON THE PLANS, PROVIDE 1" (25MM) ACOUSTICAL DUCT LINER IN SUPPLY AND RETURN DUCTWORK WITHIN 10'-0" (305CM) OF THE DISCHARGE AND INTAKE OF AIR HANDLING UNITS. INCREASE DUCT SIZE INDICATED ON PLANS AS NEEDED TO ACCOMMODATE LINER. LINER TO BE PROVIDED AND FASTENED TO DUCT WITH MECHANICAL LINER FASTENERS IN ACCORDANCE WITH SMACNA AND PROJECT MANUAL.

**FLEXIBLE DUCTWORK** FLEXIBLE DUCT WORK SHALL ONLY BE INSTALLED AS SHOWN IN PLAN AND NOT ABOVE HARD LID CEILINGS. FLEXIBLE DUCTWORK SHALL NOT EXCEED 5'-0" (152CM) IN LENGTH AND SHALL BE ELBOWS. IT SHALL BE PULLED TAUT AND APPROPRIATELY FASTENED TO RIGID BRANCH DUCT & DIFFUSER. BENDS SHALL BE MINIMIZED AND IF NEEDED BE A FULL RADIUS BEND. SUPPORT BANDS SHALL BE INSTALLED SO AS TO NOT CRIMP FLEX DUCT. FLEXIBLE DUCTWORK SHALL MEET REQUIREMENTS.

## HVAC EQUIPMENT AND MATERIALS

**AIR HANDLING UNITS** AIR HANDLING UNITS SHALL BE AS SPECIFIED IN THE MECHANICAL SCHEDULE AND SHALL BE PROVIDED AND INSTALLED PER THE LEASE AGREEMENT. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING DELIVERY, PROVIDING COMPLETE INSTALLATION INCLUDING CURBS, PIPING, VIBRATION ISOLATION, AND NECESSARY ACCESSORIES, AND PROVIDING WARRANTY.

**FILTERS** OPERATING HVAC DURING CONSTRUCTION, PROVIDE THREE (3) SETS OF 15" (381MM) MERV6 PLEATED DISPOSABLE FILTERS (OR HIGHER RATING IF REQUIRED BY LEED). USE ONE SET UNTIL COMPLETION OF CONSTRUCTION. INSTALL ONE SET AT COMPLETION OF CONSTRUCTION (PRIOR TO TAB) AND DELIVER ONE SET OF MERV13 FILTERS TO CURBS. LABELS TO DENOTE THEIR RESPECTIVE AIR HANDLING UNITS.

**EXHAUST FANS** EXHAUST FANS SHALL BE AS SPECIFIED AND PROVIDED PER THE LEASE AGREEMENT. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING DISCHARGE LOCATION WITH NEW AND EXISTING VENTS AND INTAKES, PROVIDING COMPLETE INSTALLATION INCLUDING CURBS, BACKDRAFT DAMPER, DUCTWORK FROM RESTROOM GRILLE TO UNIT, NECESSARY ACCESSORIES AND PROVIDING WARRANTY.

**BRACING AND ANCHORING** ALL MECHANICAL EQUIPMENT, FIXED OR FLEXIBLY MOUNTED, SHALL BE BRACED OR ANCHORED TO COMPLY WITH LOCAL CODES.

## IAQ MANAGEMENT PLAN

DURING CONSTRUCTION, CONTRACTOR SHALL COMPLY WITH CHAPTER 3 OF SMACNA'S IAQ GUIDELINES FOR OCCUPIED BUILDINGS UNDER CONSTRUCTION. CONTRACTOR SHALL PERFORM AND SUBMIT ALL INFORMATION AS REQUIRED. IF HVAC SYSTEM IS TO BE USED DURING CONSTRUCTION, INSTALL MERV 8 FILTERS AT EACH RETURN AIR GRILL AND COMPLY WITH SMACNA'S GUIDELINES REFERENCED BELOW.

## GENERAL MECHANICAL NOTES

- MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR TO PATCH AND REPAIR ALL EXISTING WALLS, FLOORS, CEILINGS OR OTHER SURFACES IDENTIFIED TO REMAIN THAT MAY BECOME DAMAGED DURING THE COURSE OF WORK.
- DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL INTENT OR ARRANGEMENT OF SYSTEM(S). FURNISH & INSTALL ALL COMPONENTS NEEDED WHETHER INDICATED OR NOT TO PROVIDE A COMPLETE AND OPERATING SYSTEM.
- CONTRACTOR TO VERIFY ALL DIMENSIONS, INCLUDING CLEARANCES REQUIRED BY OTHER TRADES, AND NOTIFY STARBUCKS CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK. ALL DIMENSIONS ARE TO THE FACE OF THE FINISHED SURFACE UNLESS NOTED OTHERWISE. ALL DIMENSIONS TO BE TAKEN FROM ACTUAL BUILDING DIMENSIONS.
- THE MECHANICAL CONTRACTOR SHALL COORDINATE HVAC WORK WITH OTHER TRADES. THE ARCHITECTURAL DRAWINGS AND PROJECT MANUAL SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND PROJECT MANUAL FOR DIMENSIONED DIFFUSER LOCATIONS AND MOUNTING HEIGHTS WHERE EXPOSED.
- NEW DUCTWORK AND EQUIPMENT SHALL NOT BE INSTALLED WHERE IT OBSTRUCTS ANY EXISTING OR NEW AREAS THAT REQUIRE ACCESS.

## TESTING, ADJUSTING, BALANCING

INDEPENDENT AIR BALANCE CONTRACTOR OR QUALIFIED MECHANICAL CONTRACTOR SHALL BE QUALIFIED TO TAB WORK BY NEBB OR AABC STANDARDS. BALANCE SHALL ACCURATELY BALANCE THE SUPPLY, RETURN AND OUTSIDE AIR, EXHAUST FAN(S), HYDRONIC (WHERE APPLICABLE) AND EXHAUST FAN(S) SYSTEMS TO PROVIDE AIR AND WATER QUANTITIES WITHIN 10% PLUS MINUS OF THE VALUES INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. OPERATE AUTOMATIC CONTROL SYSTEMS AND VERIFY SETPOINTS FOR THE FAN(S), COILS, SENSORS, SV, EMS AND ECONOMIZER/OUTSIDE AIR DAMPER. SEE CONTROL AND OPERATION NOTES AND HVAC SCHEDULES AND NOTED FOR DETAILS. IF DEFICIENCIES OR SITE CONDITIONS PREVENT COMPLETE AND PROPER BALANCING, DO NOT COMPLETE WORK. SUBMIT A REQUEST FOR INFORMATION TO GET COMPLETE INFORMATION ON PROCEEDING TO COMPLETING WORK. SUBMIT THREE (3) COPIES OF THE BALANCE REPORT TO THE ENGINEER, CONSTRUCTION MANAGER AND COMMISSIONING AGENT FOR APPROVAL. THE BALANCE REPORT SHALL INCLUDE NEBB OR AABC CREDENTIALS, EQUIPMENT INSTRUMENT LIST WITH THE MOST RECENT CALIBRATION DATE AND BALANCE REPORTS FOR ALL HVAC AND EXHAUST SYSTEMS. INCLUDE A COPY OF THE BALANCE REPORT AS APPROVED BY THE ENGINEER WITH APPLICATION FOR FINAL CONTRACT PAYMENT.

## GENERAL NOTES

SCOPE THE INTENT OF THE PROJECT MANUAL AND THE DRAWINGS IS TO PROVIDE A COMPLETE AND FULLY OPERATIONAL MECHANICAL SYSTEM. THE MECHANICAL CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO COMPLETE THE MECHANICAL WORK.

**SITE EXAMINATION** THE MECHANICAL CONTRACTOR SHALL THOROUGHLY EXAMINE ALL AREAS WHERE EQUIPMENT, DUCTWORK, AND PIPING WILL BE INSTALLED AND WILL REPORT ANY CONDITION THAT, IN HIS OPINION, PREVENTS THE PROPER INSTALLATION OF THE MECHANICAL WORK.

**PENETRATIONS** WHERE PIPES AND DUCTS PENETRATE WALL, SEAL OPENINGS TO PREVENT AIR TRANSFER BETWEEN SPACES. USE FIRE RATED SEALANTS ON ALL FIRE SEPARATION PENETRATIONS, INCLUDING FLOORS. SEAL AROUND ALL PIPES AND DUCTS PENETRATING FIRE SEPARATIONS WITH NON-COMBUSTIBLE PACKING RETAINED BY METAL COLLARS. THE ASSEMBLY SHALL BE APPROVED BY STATE FIRE MARSHALL.

**STANDARDS** EQUIPMENT AND MATERIALS SHALL CONFORM TO THE APPROPRIATE PROVISIONS OF CSA, UL, ARI, ASME, ASHRAE, UL, SMACNA, SMACNA, ASHRAE, NFPA, AS APPLICABLE TO EACH INDIVIDUAL UNIT OR ASSEMBLY.

**CODES** ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE PROVINCIAL AND LOCAL CODES AND ORDINANCES. IN CASE OF CONFLICT BETWEEN THE DRAWINGS AND PROJECT MANUAL AND THE CODES AND ORDINANCES, USE WHICHEVER IS MORE STRINGENT. THE MECHANICAL CONTRACTOR SHALL SATISFY CODE REQUIREMENTS AS A MINIMUM STANDARD WITHOUT AN EXTRA COST TO STARBUCKS.

**PERMITS AND FEES** THE MECHANICAL CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS, FEES, & INSPECTIONS NECESSARY TO COMPLETE THE MECHANICAL WORK.

**WARRANTY** THE MECHANICAL CONTRACTOR SHALL UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY STARBUCKS AND WILL REPAIR OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE AND RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING DEFECTIVE MATERIALS AND WORKMANSHIP.



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STARBUCKS TEMPLATE VERSION | 2019.01.11

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FOR CONSTRUCTION

PROJECT NAME:  
**HARDEN & POLK**

PROJECT ADDRESS:  
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STORE #: 2965  
PROJECT #: 21120-060  
ISSUE DATE: 08/10/2020  
DESIGNER: RAI MONTERO  
PRODUCTION DESIGNER: PAUL HARLOR  
CHECKED BY: RAI MONTERO

Revision Schedule		
Rev	Date	Description

SHEET TITLE:  
**MECHANICAL NOTES**

SCALE: AS SHOWN

SHEET NUMBER:

**M001**

**AHU System Sizing Summary for AHU Overall**

Project Name: SBUX Hardening Polk FL  
 Date: 07/17/2020  
 Revised: 02/19/24

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**System Information**

Air System Name	AHU Overall	Number of zones	1
Equipment Class	PKG ROOF	Floor Area	2500.0 ft <sup>2</sup>
Air System Type	SZCAV	Location	Tampa, Florida

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**Sizing Calculation Information**

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

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**Central Cooling Coil Sizing Data**

Total coil load	19.5 Tons	Load occurs at	Jul 1600
Total coil load	234.3 MBH	OA DB / WB	91.6 / 76.9 °F
Sensible coil load	153.5 MBH	Entering DB / WB	76.9 / 67.6 °F
Coil CFM at Jul 1600	8000 CFM	Leaving DB / WB	59.1 / 58.3 °F
Max block CFM	8000 CFM	Coil ADP	57.1 °F
Sum of peak zone CFM	8000 CFM	Bypass Factor	0.100
Sensible heat ratio	0.855	Resulting RH	63 %
CFM/Ton	408.8	Design supply temp.	58.1 °F
ft <sup>3</sup> /Ton	128.0	Zone Total Check	1 of 1 OK
BTU/(hr·ft <sup>3</sup> )	93.7	Max zone temperature deviation	0.0 °F
Water flow @ 10.0 °F rise	N/A		

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**Central Heating Coil Sizing Data**

Max coil load	35.3 MBH	Load occurs at	Des Htg
Coil CFM at Des Htg	8000 CFM	BTU/(hr·ft <sup>3</sup> )	14.1
Max coil CFM	8000 CFM	Ent. DB / Lvg DB	65.3 / 68.4 °F
Water flow @ 20.0 °F drop	N/A		

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**Supply Fan Sizing Data**

Actual max CFM	8000 CFM	Fan motor BHP	5.50 BHP
Standard CFM	7997 CFM	Fan motor kW	4.56 kW
Actual max CFM/ft <sup>2</sup>	3.20 CFM/ft <sup>2</sup>		

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**Outdoor Ventilation Air Data**

Design airflow CFM	1075 CFM	CFM/person	15.81 CFM/person
CFM/ft <sup>2</sup>	0.43 CFM/ft <sup>2</sup>		

## 1 HVAC LOAD CALCULATION

N.T.S.