

AIR BALANCE SCHEDULE						
TAG	SUPPLY AIR	OUTSIDE AIR	RETURN AIR	EXHAUST AIR	BLDG. PRESSURE	% OUTSIDE AIR
RTU-1	3750 CFM	750 CFM	3000 CFM		+ 600 CFM	20
RTU-2	2400 CFM	600 CFM	1800 CFM		+ 600 CFM	25
RTU-3	2400 CFM	600 CFM	1800 CFM		+600 CFM	25
RTU-4	3750 CFM	750 CFM	3000 CFM		+ 600 CFM	20
EF-1				1100 CFM*	- 1100 CFM	
EF-2				800 CFM*	- 800 CFM	
EF-3				225 CFM	- 225 CFM	
TOTAL	12300 CFM	2700 CFM	9600 CFM	2125 CFM	+ 275 CFM	
*NOTE: UPON START-UP VERIFY THAT THE EXHAUST FAN CURRENT SENSOR IS SET TO THE MOTOR AMPERAGE. IF IT IS NECESSARY TO ADJUST THE AMPERAGE OF THE EXHAUST HOOD FAN MOTOR, THE FAN MOTOR CURRENT SENSOR MUST BE RESET BY THE ELECTRICAL CONTRACTOR AS FOLLOWS: ADJUST UNDERCURRENT POTENTIOMETER TO MINIMUM (CLOCKWISE IS MAXIMUM.) APPLY CURRENT. ONCE CURRENT IS STABILIZED, INCREASE UNDERCURRENT POT UNTIL RED LED LIGHTS. WITHIN SEVEN SECONDS TURN DOWN UNTIL RED LIGHT TURNS OFF. IF A LIGHT REMAINS ON FOR MORE THAN TEN SECONDS, DISCONNECT SUPPLY VOLTAGE TO RESET. SEE MANUFACTURERS OPERATION-INSTALLATION INSTRUCTIONS THAT SHIP WITH THE FAN. WITH LIMITED BUILDING PRESSURE, THE ±10% TOLERANCE IS NOT ACCEPTABLE. SET CFM AS SPECIFIED. ENSURE THAT EXHAUST FAN PULLEY IS ADJUSTED FOR PROPE						

PACKAGE

MANUFACTURER
NODEL
OCATION, CURB DIMENSION
YPE OF HEAT

	TOTAL COOLING CAPACITY,
	SENSIBLE COOLING CAPACIT
	ENTERING AIR CONDITIONS, I
I	

SUPPLY AIR, CFM
OUTSIDE AIR, CFM
EXTERNAL STATIC PRESSURE, "V

	SCHEDULE	
TAG	EF-1	EF-2
MANUFACTURER	COOK	COOK
MODEL	120 CPS-BK	100 CPS-BK
LOCATION	ROOF	ROOF
AREA SERVED	BROILER	FRYERS
CFM	1100*	800*
STATIC PRESSURE, "WG	1.85"	2.5"
FAN HORSEPOWER	1.0	1.0
FAN RPM	1957	2675
DRIVE	BELT	BELT
ELECTRICAL REQUIREMENT, V/Ø/HZ	208-230/1/60	208-230/1/60
ROOF OPENING, INCHES	22X22	22X22
ROOF CURB	YES	YES
BACKDRAFT DAMPER	NO	NO
BIRDSCREEN	NO	NO
GREASE TROUGH	YES	YES
INTERLOCK	YES	YES
* SEE AIR BALANCE SCHEDULE NOTE: VERIFY ALL INFORMATION WITH MANUFACTURE	R PRIOR TO ORDERING	S AND INSTALLATION

13.5X13.5

YES

YES

YES

NO

\* PROVIDE WITH PVCR9 SLIDING-BLADE DAMPER \*\* PROVIDE WITH EIGHT 14"Ø-TO-12"Ø REDUCERS FOR INSTALLATION ON TOP OF DIFFUSERS NOTE: LOCATION AND ORIENTATION OF DIRECTIONAL BLOW PATTERN DIFFUSERS IN THE KITCHEN IS CRITICAL INSTALLER WILL ENSURE PROPER INSTALLATION OF DIFFUSERS. CONTACT THE NCA CONSULTANTS PROJECT COORDINATOR IMMEDIATELY WITH ANY CONFLICTS THAT PREVENT INSTALLATION PER THE PROPOSED DESIGN.

ATTENTION GENERAL CONTRACTOR: "RE-ENGINEERING" DEVIATIONS FROM THE SHOWN DESIGN AND REQUIRED HVAC EQUIPMENT MUST BE APPROVED IN ADVANCE BY THE ARCHITECT AND PROFESSIONAL ENGINEER. INAUTHORIZED SUBSTITUTIONS OR ALTERATIONS WILL VOID THE SIGNATURE AND SEAL OF THE PROFESSIONAL ENGINEER AND AVE VIOLATORS RESPONSIBLE FOR RESUBMISSION OF SIGNED AND SEALED DRAWING

# CONTRACTORS NOTES

HVAC CONTRACTOR 1. THE HVAC CONTRACTOR SHALL FURNISH AND INSTALL THE HVAC SYSTEM AS SHOWN IN THE NCA HVAC EQUIPMENT PACKAGE NOTE, THIS SHEET. ALL FANS SHALL BE U.L. LISTED.

2. THE HVAC CONTRACTOR SHALL INSTALL THE EXHAUST HOOD. REFER TO MOST RECENT KITCHEN PLANS ON SITE. HOOD EXHAUST DUCT IS FACTORY-MANUFACTURED, NON-WELD, DOUBLE-WALLED DUCT WITH ZERO-CLEARANCE TO COMBUSTIBLES RATING. MANUFACTURED BY METAL-FAB. INSTALL ALL HOOD EXHAUST DUCT PER MANUFACTURERS PUBLISHED REQUIREMENTS THAT SHIP WITH THE DUCTWORK. VERIFY LOCATION ON SITE WITH MOST RECENT KITCHEN EQUIPMENT PLAN. 3. ALL AIR CONDITIONING UNIT CURBS SHALL BE SUPPLIED BY NCA CONSULTANTS.

4. ALL AIR CONDITIONING UNIT CURBS SHALL BE FABRICATED BY NCA CONSULTANTS FROM 18 GA. GALVANIZED METAL WITH WELDED SEAMS, WATER TIGHT AND INTERNALLY INSULATED. 5. SHIMS SHALL BE PROVIDED BY HVAC CONTRACTOR BETWEEN THE ROOF DECK AND THE CURB AS NEEDED TO COMPENSATE FOR

ROOF PITCH. 6. ALL FLEX DUCT SHALL BE FOIL-BACKED, R-6, U.L. LISTED, CLASSIFIED AS A CLASS 1 AIR DUCT, AND MEET LOCAL CODE REQUIREMENTS.

7. EXCLUDING ANY EXPOSED DUCTWORK, ALL NON-FLEXIBLE DUCT AND ALL AIR DISTRIBUTION DEVICES SHALL BE INSULATED WITH R-6, 2" X .75 DENSITY FOIL-BACKED INSULATION, WITH FIRE AND SMOKE RATING [25]-[50].

8. ALL DUCTWORK SHALL BE INDEPENDENTLY HUNG FROM STRUCTURAL MEMBERS.

9. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED PER SMACNA LOW-VELOCITY DUCT MANUAL (LATEST ISSUE).

10. UNLESS OTHERWISE NOTED, EVERY SUPPLY TAP COLLAR SHALL HAVE A LOCKING MANUAL VOLUME DAMPER.

11. THE HVAC CONTRACTOR SHALL COORDINATE DIFFUSER LOCATIONS ON SITE WITH THE MOST RECENT REFLECTED CEILING PLAN. 12. THE HVAC CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE COVERING A ONE-YEAR PERIOD FOR ALL EQUIPMENT AND AN ADDITIONAL FOUR-YEAR PERIOD FOR THE COMPRESSORS IN THE AIR CONDITIONING UNITS.

13. UPON COMPLETION OF PROJECT THE HVAC CONTRACTOR SHALL HIRE AN A.A.B.C. OR N.E.B.B. CERTIFIED, INDEPENDENT TEST AND BALANCE COMPANY TO CONDUCT A COMPLETE, CERTIFIED TEST AND BALANCE OF ALL HVAC EQUIPMENT. PROVIDE A WRITTEN REPORT TO NCA CONSULTANTS. ALL CAPACITIES MUST BE SET TO AMOUNTS INDICATED ON THE FLOOR PLANS AND SCHEDULES.

14. THE HVAC CONTRACTOR SHALL VERIFY LOCATIONS OF THE EXHAUST HOOD AND EF-1 FROM MOST RECENT KITCHEN EQUIPMENT PLANS ON SITE. THIS IS TO ENSURE NO OFFSETS IN EXHAUST DUCTWORK. 15. HVAC CONTRACTOR IS TO MAKE ALL LOW-VOLTAGE WIRING FINAL CONNECTIONS FOR ALL HVAC EQUIPMENT INCLUDING SENSORS, THERMOSTATS, AUDIO-VISUAL ANNUNCIATORS, ROOF-TOP UNITS, SMOKE DETECTORS, CONTACTOR PANEL, AND CONTROL PANEL.

## GENERAL CONTRACTOR

1. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO RECEIVE, OFFLOAD, AND STORE ALL HVAC MATERIALS WHICH ARRIVE AT THE JOB SITE. JOINT EFFORT BETWEEN G.C. AND M.C. SHALL BE UNDERTAKEN TO POSITION HOODS IN THE KITCHEN, FOR INSTALLATION.

2. IT IS VERY IMPORTANT THAT ACCURATE MEASUREMENTS ARE USED WHEN LOCATING EXHAUST FAN ROOF OPENING TO ENSURE THAT NO OFFSETS ARE REQUIRED IN THE EXHAUST DUCTWORK FROM THE KITCHEN HOOD. COORDINATE ROOF OPENINGS WITH THE KITCHEN EQUIPMENT PLAN AND EXHAUST HOOD PLANS. OBTAIN THE CORRECT PLANS FROM THE KITCHEN EQUIPMENT SUPPLIER. 3. RTU ROOF OPENING SIZES AND ROOF CURBS ARE BASED ON EQUIPMENT SHOWN. IF OTHER EQUIPMENT IS USED, VERIFY ROOF OPENING REQUIREMENTS, MAKE PENETRATION AS NEEDED FOR INSTALLATION OF NEW CURB AND RTU, COORDINATE ON SITE WITH HVAC CONTRACTOR. ENSURE THAT ROOFING MATERIAL DOES NOT COVER THE TOP OF ANY HVAC EQUIPMENT CURB.

4. ANY FRAMING REQUIRED FOR HVAC WORK SHALL BE BY THE GENERAL CONTRACTOR. 5. GENERAL CONTRACTOR IS TO PROVIDE ANY SCREENING, GUARD RAILS, ETC. FOR ROOF-MOUNTED HVAC EQUIPMENT PER IBC and local codes.

6. ANY EXPOSED HVAC WORK IN THE DINING ROOM IS TO BE PREPARED, PRIMED, AND PAINTED BY THE GENERAL CONTRACTOR. 7. NOTE: EXCLUDING THE DUCT THAT SHIPS WITH THE HOODS, THE EXHAUST RISERS CANNOT HAVE ADDITIONAL, 'FIELD' OFFSETS. TRUSSES CLOSEST TO THE EXHAUST RISERS MUST BE SPACED SO THAT NO ADDITIONAL OFFSETS ARE NEEDED. FIELD VERIFY AND COORDINATE WITH GENERAL CONTRACTOR.

#### ELECTRICAL CONTRACTOR

1. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL PITCH POCKETS FOR POWER AND CONTROL WIRING TO MAINTAIN 12" MINIMUM CLEARANCE FROM BACK PANEL OF AIR CONDITIONING UNITS AND EXHAUST FANS. ELECTRICAL CONTRACTOR SHALL NOT PENETRATE BOTTOM OF RTU CURB AND EXHAUST FANS.

2. THE ELECTRICAL CONTRACTOR SHALL INSTALL THE CONTACTOR PANEL, ON-OFF PANEL, AND LOW-VOLTAGE CONTROL WIRING FOR ALL AIR CONDITIONING UNITS AND CONTROLS. COORDINATE AIR CONDITIONING AND ELECTRICAL PLANS. REFER TO SHEET E-5 FOR PANEL INFORMATION. FOR PROJECTS WITHOUT A PANEL THE ELECTRICAL CONTRACTOR WILL INTERLOCK THE COOKING APPLIANCE AND HVAC EQUIPMENT PER NFPA96. 3. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECTS FOR ALL HVAC EQUIPMENT.

4. THE ELECTRICAL CONTRACTOR SHALL USE A MINIMUM OF 4'-6" SEALTITE FLEXIBLE CONDUIT WHEN WIRING KITCHEN HOOD EXHAUST FANS ON ROOF SO THAT FANS MAY BE REMOVED FROM CURBS AND PLACED ON ROOF FOR CLEANING EXHAUST DUCTWORK.

5. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ANY ADDITIONAL INTERLOCK REQUIRED BY LOCAL CODE BETWEEN THE HVAC EQUIPMENT, SMOKE DETECTORS, EXHAUST FANS, AND COOKING APPLIANCES. 6. ELECTRICAL CONTRACTOR SHALL RUN LINE VOLTAGE FROM THE CURRENT SENSOR LOCATED IN THE GREASE EXHAUST FAN TO

THE CONTACTOR PANEL LOCATED BY THE SWITCHGEAR. 7. FOR EACH UNIT, THE ELECTRICAL CONTRACTOR SHALL PROVIDE ONE SINGLE-GANG RECEPTACLE TEST STATION FOR THE REMOTE

SENSOR, AND ONE DOUBLE-GANG RECEPTACLE TEST STATION FOR THE ANNUNCIATOR, WITH GREEN AND RED LIGHT INDICATORS. THE FIRE AND MECHANICAL INSPECTORS WILL DETERMINE SUITABLE LOCATION FOR TEST STATIONS. ANNUNCIATORS AND TEST STATION WILL BE LOOPED IN THE CIRCUITRY OF THE SMOKE DETECTION DEVICES. WIRING WILL BE INSTALLED BY ELECTRICAL CONTRACTOR. PROVIDE ADDITIONAL RECEPTACLES IN MANAGERS OFFICE FOR THERMOSTATS.

## PLUMBING CONTRACTOR

1. THE PLUMBING CONTRACTOR IS TO PROVIDE AND INSTALL PITCH POCKETS FOR CONDENSATE DRAINS/GAS PIPING FOR ALL A/C UNITS AND EXHAUST FANS. PLUMBING CONTRACTOR SHALL NOT PENETRATE BOTTOM OF RTU CURB. 2. THE PLUMBING CONTRACTOR TO COORDINATE PLUMBING VENT STACKS WITH OUTSIDE AIR INTAKES OF A/C UNITS. MAINTAIN 10'-0" MINIMUM CLEARANCE OR PER LOCAL CODE.

3. THE PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL FLUE GAS EXHAUST VENT FOR WATER HEATER. MAINTAIN 10'-0" MINIMUM HORIZONTAL OR 3' VERTICAL CLEARANCE TO AIR INTAKES.

UPON COMMENCEMENT OF ROUGH-IN AS SCHEDULED BY NCA CONSULTANTS, THE AIR Conditioning contractor is to remain on the Job site full time until the rough-in is 100% COMPLETE. THE GENERAL CONTRACTOR'S SITE SUPERINTENDENT WILL VERIFY. upon commencement of trim-out as scheduled by NCA consultants, the air CONDITIONING CONTRACTOR IS TO REMAIN ON THE JOB SITE FULL TIME UNTIL THE TRIM-OUT IS 100% COMPLETE. THE GENERAL CONTRACTOR'S SITE SUPERINTENDENT WILL VERIFY.

Date By Notes	a 226,21 DB PLANNING SUBMITTAL B A 3 5,26,21 DB PLANNING SUBMITTAL	The second secon	D 0.27.21 A3 BUILDING REVISIONS   6 10.29.21 AS ENGINEERING REVISIONS	7 12.10.21 AS BUILDING REVISIONS 2	ALL RIGHTS RESERVED. NO PART OF THESE DRAWINGS OR SPECIFICATIONS MAYBE COPIED, REPRODUCED OR USED IN CONNECTION WITH ANY WORK, OTHER THEN THE SPECIFIC PROJECT FOR WHICH THE HAVE BEEN PREPARED, WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE ARCHITECT.	
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