

TABLE 403.3 OA REQUIREMENTS									
ROOM	AREA (SF)	AREA RATE	AREA CFM	PEOPLE CALCULATION BASIS	NO. OF PEOPLE	PEOPLE RATE	PEOPLE CFM	COOLING REQUIRED CFM	HEATING REQUIRED CFM
DINING	1922	0.18 CFM/SF	346	70 P / 1000 SF	135	7.5 CFM / P	**1012/2 = 506	**1360/2 = 679	**1710/2 = 855
KITCHEN	1245	-	-	-	-	-	-	*SEE NOTE BELOW	*SEE NOTE BELOW
CORR / UTILITY	414	0.06 CFM/SF	25	-	-	-	-	25	25

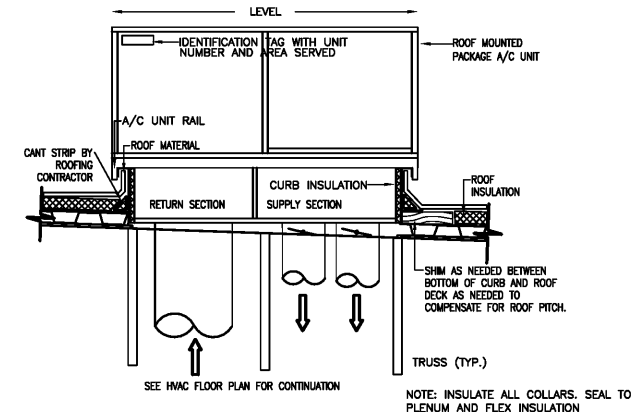
TOTAL OUTSIDE AIR REQUIRED = 1385 CFM

MECHANICAL CONTRACTOR TO ADJUST OUTSIDE AIR QUANTITIES PER THE FOLLOWING SCHEDULE:
RTU-1 = 800 CFM
RTU-2 = 750 CFM
RTU-3 = 750 CFM
RTU-4 = 1000 CFM

TOTAL OUTSIDE AIR PROVIDED = 3100 CFM.

*KITCHEN REQUIRES 0.7 CFM/SF EXHAUST: 1245 SF x 0.7 CFM/SF = 871 CFM EXHAUST MINIMUM, HEF-1 AND HEF-2 PROVIDES 1,870 CFM OF EXHAUST.

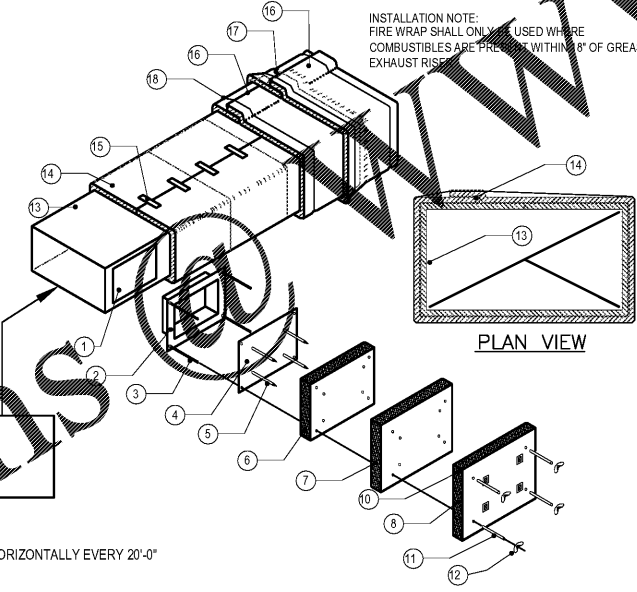
** ACCORDING TO ASHRAE 62.1.3.4 INTERMITTENT OR VARIABLE OCCUPANCY, WHERE PEAK OCCUPANCIES OF LESS THAN THREE HOURS DURATION OCCUR, THE OUTSIDE AIR REQUIREMENT MAY BE REDUCED, PROVIDED THAT THE AVERAGE OCCUPANCY IS GREATER THAN ONE-HALF THE MAXIMUM.



DUCT RISER/LEVELING DETAIL
NOT TO SCALE

- NOTES:
- BANDING MATERIAL 3/4" WIDE, MINIMUM 0.015" THICK, CARBON STEEL FOR CONSTRUCTION REQUIREMENTS OF ZERO CLEARANCE TO COMBUSTIBLES OR 1 HR. RATINGS. STAINLESS STEEL BANDING IS USED FOR 2 HR. REQUIREMENTS.
 - 3M FIRE BARRIER DUCT WRAP 615, 1 1/2" THICK, 24" OR 48" WIDE, 300" STANDARD LENGTH (2 LAYERS); 8 LBS PER CUBIC FT. TO BE UTILIZED.
 - HOLD INTERIOR WRAP OF INSULATION USING 1" WIDE FILAMENT TAPE (NO. 888) MANUFACTURED BY 3M COMPANY.
 - SEAL CUT EDGES OF BLANKET WITH ALUMINUM FOIL TAPE.

LEGEND	
1	DOOR HOLE
2	ACCESS FRAME WELDED TO DUCT
3	1/4" DIA. ALL THREAD RODS
4	ACCESS COVER, 16 GA.
5	INSULATION PINS, WELDED
6	1 3M FIRE BARRIER 615 PLUS
7	1 3M FIRE BARRIER 615 PLUS 1" OVERLAP
8	1 3M FIRE BARRIER 615 PLUS 1" OVERLAP
9	SPEED CLIPS
10	ALUMINUM TAPE EDGES
11	SPOOL PIECES FOR THREADED RODS
12	1/4" DIA. WING NUTS
13	16 GA. SHEET METAL DUCT (FULLY WELDED WATER TIGHT)
14	1ST LAYER 3M FIRE BARRIER DUCT WRAP 615 PLUS LONGITUDINAL JOINT BUTT OR MIN. 3" OVERLAP ON INNER LAYER, MIN. 3" OVERLAP ON OUTER LAYER
15	3/4" (19mm) WIDE FILAMENT TAPE
16	2ND LAYER 3M FIRE BARRIER DUCT WRAP 615 PLUS OR APPROVED EQUIVALENT
17	3" MINIMUM PERIMETER OVERLAP - TYP.
18	STEEL BANDING 1/2" WIDE, MIN. TYP. FOR PERMANENT FASTENING



FULLY WELDED GREASE RATED EXHAUST DUCT. SEE SIZE ON PLAN. RISER SHALL BE LIGHT INSPECTED LAYING ON FLOOR. FULLY PREPARE FOR SCHEDULED INSPECTION. HVAC CONTRACTOR SHALL VERIFY TEST PRIOR TO SCHEDULED INSPECTION. THE USE OF U.L. LISTED PREFABRICATED DUCT BY CONTRACTOR ARE INSTALLED CORRECTLY MAY BE EXEMPT FROM INSPECTION. SEE U.S. AIR CONDITIONING CONTRACTORS ASSOCIATION (USACA) STANDARDS.

NOTE: ACCESS DOOR NOT REQUIRED UNLESS OFFSET, OR HORIZONTALLY EVERY 20'-0"

1 HR. FIRE WRAP ("0" CLEARANCE) TO COMUSTIBLES -
INSTALLATION DETAIL

Order Plans

HVAC EQUIPMENT PACKAGE
PLAN AND SPECIFICATIONS AS PER P.E. SEAL

POPEYES LOUISIANA KITCHEN HAS DESIGNATED THE NCA GROUP AS THE NATIONAL ACCOUNT VENDOR FOR THE HVAC EQUIPMENT PACKAGE. NCA SHALL VISIT THE SITE, AS AUTHORIZED, TO VERIFY THAT ALL MATERIALS, EQUIPMENT AND INSTALLATION ARE PER THE ENGINEER OF RECORDS DRAWINGS. THE PROTOTYPE BASIS OF DESIGN PLANS HAVE BEEN CREATED BY NCA CONSULTANTS, COPYRIGHT 2018.

FOR COMPLETE INFORMATION AND PRICING ON THE FOLLOWING PACKAGE OF EQUIPMENT AND ACCESSORIES CONTACT THE NCA GROUP MARKETING DEPARTMENT TOLL-FREE AT (877) 530-0078.

HEATING COOLING EQUIPMENT PACKAGE
INCLUDES ALL ROOFTOP AIR CONDITIONING EQUIPMENT WITH ALL ACCESSORIES AS SPECIFIED ON THESE PLANS.

RESTROOM FAN PACKAGE
INCLUDES THE RESTROOM FAN WITH ALL ACCESSORIES AS SPECIFIED ON THESE PLANS.

AIR DEVICE PACKAGE
INCLUDES ALL ALUMINUM GRILLES, REGISTERS AND DIFFUSERS PER PLANS. SQUARE TO ROUND TRANSITIONS PROVIDED WHERE REQUIRED.

CURB PACKAGE
INCLUDES ONE-PIECE, FULLY WELDED NCA PLENUMIZED ROOF CURBS FOR ALL ROOF MOUNTED HEATING/COOLING EQUIPMENT, AND RESTROOM FAN CURB.

CONTROLS PACKAGE
INCLUDES PRESET DIGITAL THERMOSTATS, THERMOSTAT WIRE, LOCKING COVERS, SMOKE DETECTORS AND AUDIBLE-VISUAL DEVICES; ALSO MANUAL ON-OFF PANEL AND MASTER CONTACTOR PANEL. SEE ELECT. SHEETS FOR PANEL DIAGRAM.

AIR BALANCE INSTRUCTIONS
INSTALLING CONTRACTOR IS RESPONSIBLE FOR HAVING A CERTIFIED, INDEPENDENT A.A.B.C. OR N.E.B.B. CERTIFIED TEST AND BALANCE COMPANY PERFORM A TEST AND BALANCE ON THE EXHAUST AND VENTILATION SYSTEM. TEST AND BALANCE COMPANY MUST BE INDEPENDENT AND NOT ON THE HVAC INSTALLERS STAFF. CONTRACTOR SHALL PROVIDE WRITTEN REPORT CERTIFYING SYSTEM BALANCE TO NCA CONSULTANTS, ARCHITECT, AND OWNER.

NOTE: "RE-ENGINEERING" DEVIATIONS FROM THE SHOWN DESIGN AND REQUIRED HVAC EQUIPMENT MUST BE APPROVED IN ADVANCE BY THE PROFESSIONAL ENGINEER & ARCHITECT OF RECORD. UNAUTHORIZED SUBSTITUTIONS OR ALTERATIONS WILL VOID THE SIGNATURE AND SEAL OF THE PROFESSIONAL ENGINEER & ARCHITECT OF RECORD AND LEAVE VIOLATORS RESPONSIBLE FOR RESUBMISSION OF SIGNED AND SEALED DRAWINGS.

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