

GENERAL:

- LOCATE, CUT AND FRAME ROOF OPENINGS AS SHOWN FOR ALL HVAC EQUIPMENT AND EXHAUST FANS.
- IT IS VERY IMPORTANT THAT ACCURATE MEASUREMENTS ARE USED WHEN LOCATING EXHAUST FAN ROOF OPENINGS TO ENSURE THAT NO ADDITIONAL OFF-SETS ARE REQUIRED IN THE EXHAUST DUCTWORK. COORDINATE ROOF OPENINGS WITH THE KITCHEN EQUIPMENT.
- PROVIDE ANY FRAMING REQUIRED FOR DIFFUSER INSTALLATION IN HARD CEILING.

HVAC:

- INSTALLATION SHALL CONFORM TO THE ENERGY CONSERVATION DESIGN MANUAL STANDARDS FOR NEW NONRESIDENTIAL BUILDINGS.
- ALL WORK AND MATERIALS SHALL COMPLY WITH GOVERNING CODES, SAFETY ORDERS AND REGULATIONS.
- OBTAIN AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY GOVERNING AUTHORITIES.
- E.C. SHALL PROVIDE CONDUIT FOR LINE AND LOW VOLTAGE WIRING, LINE VOLTAGE WIRING SWITCHES, AND FINAL CONNECTIONS.
- M.C. SHALL PROVIDE 24V CONTROL WIRING AND FINAL CONNECTIONS. ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS.
- FOR INSTALLATION OF RECHARGEABLE REFRIGERANT LINES FROM ICE MACHINE TO CONDENSER ON ROOF, SEE SCOPE OF WORK.
- HVAC UNITS SHALL BE MOUNTED LEVEL ON ROOF CURBS.
- ALL SUPPLY / RETURN DUCTWORK SHALL BE EXTERNALLY INSULATED.
- ALL SUPPLY / RETURN DUCTS SHALL BE RIGID, WITH THE EXCEPTION OF THE LAST 5'-0", WHICH MAY BE FLEX.
- SMOKE DETECTOR SHALL BE INSTALLED IN THE RETURN AIR DUCT, PRIOR TO ANY OUTSIDE AIR CONNECTIONS, AND SHALL DEACTIVATE ROOFTOP UNIT UPON SENSING SMOKE. INCLUDE SMOKE DETECTOR IN THE SUPPLY AIR DUCT ONLY IF REQUIRED BY LOCAL CODE.
- ALL HOOD EXHAUST DUCTS SHALL BE RIGID 16 GA MINIMUM, WELDED DUCT. GRIND ALL WELDS SMOOTH. PROVIDE 3M FIRE BARRIER DUCT WRAP FOR ALL HOOD EXHAUST DUCTS. SEE 15/M4.0.
- ALL BRANCH DUCTS FEEDING INDIVIDUAL DIFFUSERS SHALL HAVE DAMPERS AT TAKEOFFS FOR AIR BALANCING. PROVIDE ACCESS PANELS TO DAMPERS. SEE 8/M4.0.
- ALL UTILITY PIPING FOR RTUS SHALL RUN UP THROUGH ROOF INSIDE EACH UNIT'S ROOF CURB.
- ALL OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10'-0" FROM EXHAUST FANS AND / OR VENTS.
- SEE 8/M1.0 AND SCOPE OF WORK FOR DESCRIPTION OF HVAC PACKAGE TO BE PURCHASED THROUGH YUM! BRANDS NATIONAL CONTRACT.
- FINAL HVAC SYSTEM TESTING AND BALANCING SHALL BE PERFORMED BY INDEPENDENT AGENT CONTRACTED DIRECTLY BY THE GC. A RE-TEST IS MANDATORY FOR A FALSE START (I.E. NO POWER UPON AGENT'S ARRIVAL, EQUIPMENT NOT WIRED, ETC.) AND SHALL BE AT A COST INCURRED BY THE G.C. IN THE EVENT A SYSTEM / STORE RECEIVES A GRADE OF 5 OR BELOW AS A RESULT OF THE HVAC SYSTEM PERFORMANCE OR OPERATIONAL DEFICIENCIES, OWNER WILL REQUEST A RE-TEST AND THE COST FOR SAME SHALL BE ALSO INCURRED BY THE GENERAL CONTRACTOR.
- HONEYWELL THERMOSTAT TH8321R1001 & REMOTE SENSOR S1-C7189U1005, PROVIDED WITH YORK PACKAGE.
- HONEYWELL DUCT MOUNTED HUMIDITY SENSOR MODEL #2EC02402 - KIT, DUAL ENTHALPY FIELD INSTALLED, PROVIDED WITH YORK PACKAGE.

GENERAL NOTES 10

SYMBOL & ABBREV.	DESCRIPTION
	SA/SUP SUPPLY AIR (RISE/DROP)
	RA/RET RETURN AIR DUCT (RISE/DROP)
	EA/EXH EXHAUST AIR DUCT (RISE/DROP)
	CD/SR CEILING DIFFUSER/SUPPLY REGISTER (ARROWHEAD REPRESENTS NUMBER OF THROW)
	RR/RG RETURN REGISTER/GRILLE
	ER/EG EXHAUST REGISTER/GRILLE
	RECTANGULAR DUCT ELBOW WITH TURNING VANES
	FLEXIBLE CONNECTION
	MANUAL VOLUME DAMPER
	FIRE DAMPER
	DUCT LINING (1" THICK UNLESS OTHERWISE NOTED)
	SINGLE LINE DUCT BRANCH TAKEOFF
	DUCT TRANSITION (RECTANGULAR TO ROUND)
	FLEXIBLE DUCT (14'-0 MAXIMUM)
	T-STAT PROGRAMMABLE THERMOSTAT, PROVIDED WITH TRANE PACKAGE.
	THERMOSTAT SENSOR (REMOTE), PROVIDED WITH TRANE PACKAGE.
	HUMIDITY SENSOR (REMOTE), PROVIDED WITH TRANE PACKAGE.
	D CONDENSATE DRAIN
	DIA. DIAMETER
	DL DOOR LOUVER
	UC DOOR UNDERCUT (3/4" MINIMUM)
	MECHANICAL EQUIPMENT DESIGNATION
	R RESET SMOKE DETECTOR RESET
	DOUBLE LINE DUCT SHOE TAP BRANCH TAKEOFF WITH VOLUME DAMPER

SYMBOL & ABBREV.	DESCRIPTION
A/C, AC	AIR CONDITIONING
BDD	BACK DRAFT DAMPER
CB	CIRCUIT BREAKER
CLG.	CEILING
CONN.	CONNECT/CONNECTION
CONT.	CONTINUATION
CONTR	CONTRACTOR
CFM	CUBIC FEET PER MINUTE
DET.	DETAIL
DISC.	DISCONNECT
DTR	DOWN THRU ROOF
EF	EXHAUST FAN
(E)	EXISTING
GA.	GAGE/GAUGE
GC	GENERAL CONTRACTOR
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
MFR.	MANUFACTURER
MECH.	MECHANICAL
(N)	NEW
OA/OSA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
S/S	STAINLESS STEEL
TYP.	TYPICAL
UON	UNLESS OTHERWISE NOTED
UTR	UP THRU ROOF

MECHANICAL SYMBOLS 12

XXX-X MARK	AREA SERVED	FAN DATA						COOLING CAPACITY				HEATING CAPACITY				UNIT ELECT DATA			MAX UNIT WEIGHT (LBS)	MANUFACTURER AND MODEL NUMBER	REMARKS
		SUPPLY CFM	MIN O.A. CFM	ESP	BHP	RPM	NOM TONS	MIN CAP (MBH) TOT/SEN	MIN EER	INPUT STAGE (MBH)	OUTPUT (MBH)	PHASE (STAGES)	AFUE	VOLTS/ PH	MCA	MOCP					
RTU-1	DINING	3000	750	0.5'	3	1523	7.5	90.5/66.0	11.2	180	148	2	81	208/3	39	50	1001	CARRIER 48FCM09B2M5	SEE NOTES 1 THRU 6		
RTU-2	KITCHEN	5000	1250	0.5'	4.14	1995	12.5	147.6/109.0	10.2	224	181	2	81	208/3	68	80	1303	CARRIER 48FCEN14B3M5	SEE NOTES 1 THRU 6		

- SCHEDULE NOTES:
- LISTED CAPACITY IS THE STANDARD UNITS GROSS COOLING CAPACITY AT 80 DEG. F. DB / 67 DEG. F. WB EAT AND 95 DEG. F. AMBIENT. OUTDOOR DESIGN CONDITION, SUMMER 93 DEG. F. & 77 DEG. F. WB, WINTER 20.0 DEG. F. (ARI STANDARD CONDITIONS). THERMOSTAT SHALL BE PROGRAMMED FOR 73 DEG. F IN SUMMER AND 70 DEG. F IN WINTER WITH 2 DEG ADJ. FUNCTION UP OR DOWN. THE UNOCCUPIED TEMP SHALL BE SET TO THE STORE SCHEDULE AND 60 DEG. F. MINIMUM.
 - SPECIFIED RTUS ARE DOWN DISCHARGE PACKAGED GAS / ELECTRIC ROOFTOP UNITS WITH MINIMUM 2-STAGE COOLING. INCLUDES THROUGH THE ROOF CURB POWER, GAS & CONDENSATE DRAIN. GAS PIPING SHALL BE FACTORY PIPED WITH SHUT-OFF OUTSIDE OF UNIT.
 - SPECIFIED UNIT INCLUDES HINGED ACCESS DOORS, 2" PLEATED FILTERS, LOW AMBIENT CONTROL TO 0 DEG. F., MODULATING ECONOMIZER, RETURN AIR SIDE SMOKE DETECTOR, CIRCUIT BREAKER WITH SINGLE POINT WIRING, HALL GUARD, AND FACTORY FABRICATED, KNOCK DOWN ROOF CURB.
 - SPECIFIED UNIT INCLUDES FACTORY WILL BE RETROFITTED WITH A RAWAL DEVICE FOR MODULATED CAPACITY AND HUMIDITY CONTROL. INSTALL COMPLETE WITH REMOTE SENSOR AS SHOWN ON THE DRAWINGS.
 - PROJECT LOCATIONS NEAR COASTAL AREAS MAY REQUIRE EPOXY COATED COILS. VERIFY REQUIREMENTS WITH THE OWNER'S CONSTRUCTION MANAGER.
 - INSTALL COMPLETE WITH MANUFACTURER AVAILABLE 24/7 WALL MOUNTED PROGRAMMABLE THERMOSTAT AND REMOTE SENSOR.

HVAC UNIT SCHEDULE 1

XX-XXX MARK	CFM	SP	RPM	HP	ELECT	STARTER	ACCESSORIES					MANUFACTURER AND MODEL NUMBER	REMARKS
							DISC	BDD	BIRD SCREEN	V-BELT	D-DR		
EF-1	1050	0.9	1344	0.50	120/1	-	X	-	-	-	X	STRATOVENT #SVDU50HFA	SEE NOTES 1,3,5,6,7,8,10
EF-2	780	.375	1196	1/4	120/1	-	X	X	X	X	X	STRATOVENT #SVD30HFA	SEE NOTES 2,4,7,8,9,10

- REMARKS:
- UL 762 LISTED (GREASE)
 - UL705 LISTED (HEAT OR STEAM)
 - FLAT ROOF CURB, 19.5" X 19.5" X 26"H, VENTED
 - FLAT ROOF CURB, 19.5" X 19.5" X 14"H
 - GREASE CUP WITH DRAIN
 - FACTORY ATTACHED HINGES
 - WEATHERPROOF PRE-WIRED DISCONNECT SWITCH
 - PROVIDE PRE-WIRED SOLID STATE SPEED CONTROLLER
 - GRAVITY BACKDRAFT DAMPER
 - PROVIDED BY OWNER WITH HOOD PACKAGE

SUPPLY AND EXHAUST FAN SCHEDULE 2

XX-XXX MARK	QUANTITY	NECK SIZE	DIFFUSER FACE OR CEILING GRID SIZE	TYPE			(NO.) & AIR PATTERN	MOUNTING		DUTY		MATERIAL		MANUFACTURER	MODEL NUMBER	REMARKS
				DIFFUSER REGISTER	GRILL	CFM RANGE		LAY-IN SURFACE	SUPPLY RETURN	EXHAUST	ALUMINUM	STEEL				
S-1	-	15x15	24x24	X			(2)4W 0-500	X	X			X	METAL-AIRE / TITUS	5000-6 / TDC-AA-NT	FRN SQR TO RND ADAPTER (SEE NOTES 3 & 4)	
S-2	-	18x18	24x24	X			(3)4W,(1)3W 500-1000	X	X			X	METAL-AIRE / TITUS	500-6 / TDC-AA-NT	FRN SQR TO RND ADAPTER (SEE NOTES 3 & 4)	
S-3	-	9x9	14x14	X			(2)4W,(1)3W 0-250		X	X		X	METAL-AIRE / TITUS	5000-1 / TDC-AA	FRN SQR TO RND ADAPTER	
S-4	-	12	24x24	X			VERT 300-700	X		X		X	METAL-AIRE / TITUS	9000-6 / MCD	STEEL MODULAR CORE	
S-5	-	12"Ø	-	X			0-500			X		X	METAL-AIRE / TITUS	3000-1 / TMRA-AA	ADJUSTABLE ROUND DIFFUSER	
R-1	-	22x22	24x24			X	NO DIREC 0-2000	X			X	X	METAL-AIRE / TITUS	RHE-6 / 50FF	HINGED / FULLY REMOVABLE FACE	
E-1	-	8x8	12X12			X	NO DIREC 0-200	X			X	X	METAL-AIRE / TITUS	CC5-FB-TB / 50F		
E-2	-	10X10	24x24			X	NO DIREC 0-400	X				X	METAL-AIRE / TITUS	CC5-FB-TB / 50F-NT	PROVIDE 2x2' LAY-IN PANEL	

- NOTES:
- DIFFUSERS IN SURFACE MOUNTED CEILINGS SHALL BE PROVIDED WITH OPPOSED BLADE DAMPERS. SEE ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
 - FURNISH DIFFUSERS WITH INSULATED TOPS.
 - SUPPLY AND RETURN DIFFUSERS LOCATED IN DINING ROOM SUSPENDED CEILING SHALL BE FACTORY FINISH BLACK.
 - BUCKEYE PLASTIC AIR DIFFUSERS, 3936 APRIL DRIVE, UNIONTOWN, OHIO 44685 330-418-9348. 14" DIA. NECK (METAL-AIRE / TITUS DIFFUSERS CAN BE USED AS AN OPTION)

AIR DEVICE SCHEDULE 3

ITEM	OA	RA	SA	EA	PRESSURE
EF-1	--	--	--	1050	-1050
EF-2	--	--	--	780	-780
RTU-1	750	2250	3000	--	+750
RTU-2	1250	3750	5000	--	+1250
TOTAL	2000	6000	8000	1830	+170

NOTE: THE OUTSIDE PERCENTAGE OF TOTAL SUPPLY AIR IS 25% FOR RTU-1 AND 25% FOR RTU-2.

AIR BALANCE SCHEDULE CFM 4

REFER TO SCOPE OF WORK 15700-1 HVAC FOR TEST & BALANCE & COMMISSIONING REQUIREMENTS WHICH WILL BE SUPPLIED BY THE GC AND COORDINATED BY THE GC.

FOR COMPLETE INFORMATION AND PRICING ON THE TRANE HVAC PACKAGE CONTACT MARTY CUSICK, THE YUM! BRANDS ACCOUNT EXECUTIVE AT TRANE NATIONAL ACCOUNTS. TOLL-FREE PHONE: (866) YUM-HVAC or (866) 986-4822. FAX: (502) 499-7870 EMAIL: mjcusick@trane.com

TRANE AND YORK HAVE AGREED TO SUPPLY AN HVAC PACKAGE CONSISTING OF THE ROOF-TOP UNITS, CURBS, THERMOSTATS, TEMPERATURE SENSORS (REMOTE), AND HUMIDITY SENSORS (REMOTE). RTUS AS SPECIFIED INCLUDE AN UNPOWERED CONVENIENCE OUTLET (SEE ELECTRICAL) AND AN HACR CIRCUIT BREAKER WHICH PROVIDES UNIT DISCONNECT. TRANE AND YORK ALSO HAVE AVAILABLE OPTION PACKAGES WHICH INCLUDE SMOKE DETECTORS AND ANNUNCIATORS, ECONOMIZERS, AND RTU VARIATIONS SUCH AS HIGH-EFFICIENCY MODELS.

FOR HVAC TEST AND BALANCE, GC TO SCHEDULE WITH TACO BELL'S PREFERRED VENDOR PER SCOPE OF WORK WORKSHEETS.

BE PREPARED AT TIME OF ORDER OR QUOTE REQUEST TO PROVIDE ALL PROJECT DETAILS REGARDING SPECIFICATIONS AND QUANTITIES AS SITE SPECIFIC DESIGN MAY NOT MATCH NATIONAL DESIGN.

SEE THE SCOPE OF WORK SHEETS FOR ADDITIONAL INFORMATION.

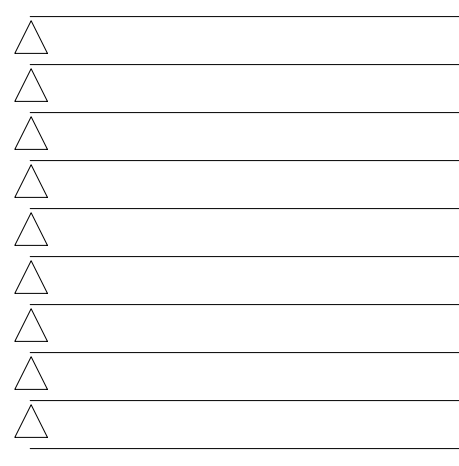
TRANE PACKAGE N.T.S. 8

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CONTRACT DATE: 03.16.23
BUILDING TYPE: ENDEAVOR 2.0
PLAN VERSION:
SITE NUMBER: TBD
STORE NUMBER: TBD

TACO BELL

1239 North Road Street
Elizabeth City, North Carolina 27909

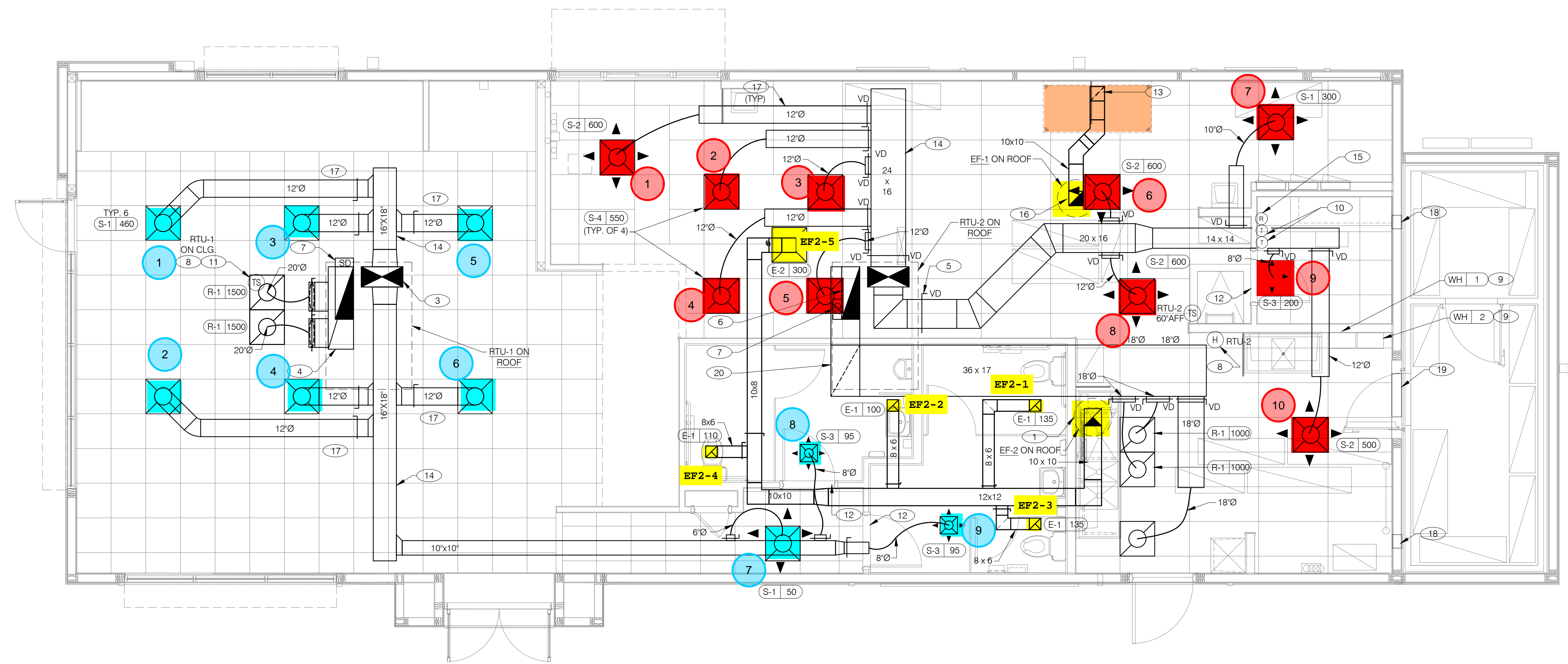


ENDEAVOR 2.0
LARGE 50

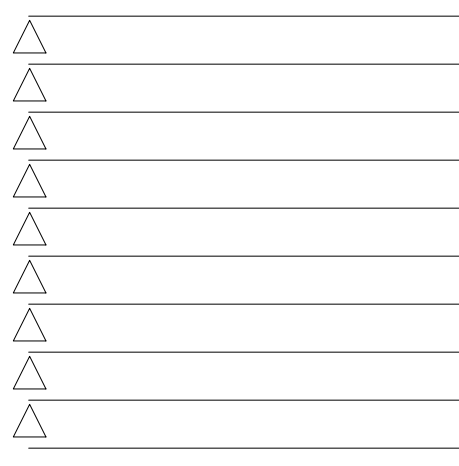
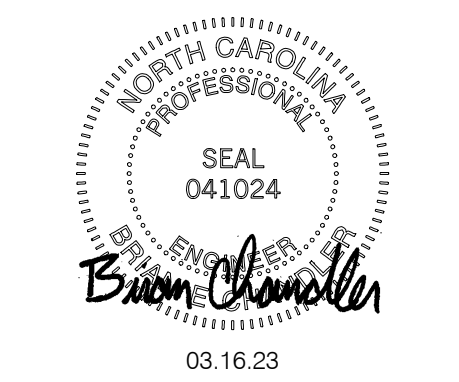
MECHANICAL SCHEDULES AND NOTES

M1.0

PERMIT PLOT DATE:



COVER ALL HVAC DUCT SYSTEM OPENINGS TO PROTECT FROM CONSTRUCTION DUST AND DEBRIS UNTIL CONSTRUCTION IS COMPLETE. IF THE HVAC SYSTEM IS OPERATED BEFORE CONSTRUCTION IS COMPLETE, PROVIDE MERV8 FILTERS AT ALL AIR INTAKES INSIDE THE BUILDING.



CONTRACT DATE: 03.16.23
 BUILDING TYPE: ENDEAVOR 2.0
 PLAN VERSION:
 SITE NUMBER: TBD
 STORE NUMBER: TBD

TACO BELL
 1239 North Road Street
 Elizabeth City, North Carolina 27909



DUCT AND DIFFUSER PLAN
M2.0

PERMIT PLOT DATE:

12 11 10 9 8 7 6 5 4 3 2 1
DUCT AND DIFFUSER PLAN 1/4"=1'-0" A

- GENERAL NOTES**
- DINING ROOM LIGHT FIXTURE LOCATIONS ARE CRITICAL. COORDINATE DUCTWORK LOCATIONS SO AS NOT TO CONFLICT WITH LIGHT FIXTURE LOCATIONS.
 - THERMOSTATS SHALL BE PROGRAMMABLE THERMOSTAT WITH SUBBASE, REMOTE TEMPERATURE SENSOR, AND REMOTE HUMIDITY SENSOR. (PROVIDED WITH TRANE PACKAGE).
 - HUMIDITY SENSOR APPLICATION IS VARIABLE PER SITE SPECIFIC CONDITIONS. REFER TO HVAC UNIT SCHEDULE, 1/M1.0, FOR APPLICATION CONDITIONS.
 - COORDINATE DUCTWORK LOCATIONS WITH LIGHTING AND STRUCTURAL.

- 12X12 EXHAUST AIR DUCT UP THROUGH ROOF TO EF-2.
- PROVIDE SPLITTER DAMPER AND 90 DEGREE ELBOW WITH TURNING VANES.
- SUPPLY AIR DUCT UP SHALL BE FULL SIZE OF UNIT OPENING. CONNECT TO 34x18 SUPPLY AIR PLENUM AT ROOFTOP UNIT RTU-1. COORDINATE EXACT DUCT DROP WITH RTU SPECIFICATION AND ORIENTATION.
- RETURN AIR DUCT UP SHALL BE FULL SIZE OF UNIT OPENING. CONNECT TO 34x18 RETURN AIR PLENUM AT ROOFTOP UNIT RTU-1. COORDINATE EXACT DUCT DROP WITH RTU SPECIFICATION AND ORIENTATION.
- SUPPLY AIR DUCT UP SHALL BE FULL SIZE OF UNIT OPENING. CONNECT TO SUPPLY AIR PLENUM AT ROOFTOP UNIT RTU-2. COORDINATE EXACT DUCT DROP WITH RTU SPECIFICATION AND ORIENTATION.
- RETURN AIR DUCT UP SHALL BE FULL SIZE OF UNIT OPENING. CONNECT TO RETURN AIR PLENUM AT ROOFTOP UNIT RTU-2. COORDINATE EXACT DUCT DROP WITH RTU SPECIFICATION AND ORIENTATION.
- RTU SHALL BE INSTALLED COMPLETE WITH MANUFACTURER AVAILABLE SMOKE DETECTOR IN THE RETURN AIR SIDE OF THE UNIT, IN ACCORDANCE WITH LOCAL CODES. SMOKE DETECTOR SHALL BE FIELD INSTALLED IN THE RTU WIRING HARNESS.
- HUMIDITY SENSOR (REMOTE). MOUNT HUMIDITY SENSORS FOR RTU-2 AT 60" AFF AND FOR RTU-1 AT CEILING NEXT TO TEMP SENSOR. COORD EXACT LOCATION IN FIELD.
- FURNISH AND INSTALL 3" PVC WATER HEATER COMBUSTION AIR INTAKE AND VENT ON ROOF. COORDINATE WORK WITH ALL TRADES. MAINTAIN MIN. 10'-0" FROM NEAREST RTU INTAKE. REFER TO DETAILS 2/P6.0, 13/A6.0.
- LOCATE THERMOSTAT CONTROLS ON WALL IN OFFICE AT 48" A.F.F. COORDINATE LOCATION WITH LIGHT SWITCHES.

- MOUNT THERMOSTAT/REMOTE SENSOR AT AT HEIGHT SHOWN.
- UNDERCUT RESTROOM DOORS AND OFFICE DOOR MIN. 3/4" FOR MAKE-UP AIR.
- 10X10 EXHAUST AIR DUCT DOWN AND TRANSITION TO EXHAUST CONNECTION AT HOOD. EXHAUST DUCT SHALL RUN BETWEEN ROOF TRUSSES TO CONNECT TO ROOF EXHAUST FAN EF-1. SEE HOOD DETAILS ON DRAWING M3.0. SEE DETAIL 15 ON SHEET M4.0 FOR FIRE PROTECTION OF DUCT WORK. SEE DETAIL 18 ON SHEET M4.0 FOR EXHAUST DUCT TRANSITION.
- RUN DUCTWORK BETWEEN TRUSSES AS HIGH AS POSSIBLE UNDER ROOF JOISTS.
- NEW SMOKE DETECTOR RESET SWITCH WITH KEY. MFR. IS "SYSTEM SENSOR" MODEL # RT5151 KEY. MOUNT NEXT TO THERMOSTATS @ 48" A.F.F. - INSTALL PER MFR. SPECIFICATIONS.
- EXHAUST DUCTWORK RUN UP BETWEEN ROOF TRUSSES TO EF-1.
- RUN DUCT THROUGH OPEN WEBBING OF ROOF TRUSSES (WHERE POSSIBLE). COORDINATE WITH TRUSS DESIGN PRIOR TO DUCTWORK FABRICATION.
- AIR TRANSFER GRILLS. SEE SECTION "B" ON SHEET A5.2.
- ACCESS OPENING TO SPACE ABOVE WALK-IN. SEE SHEET A7.1.
- RETURN AIR PLENUM DOWN FROM RTU-2. TRANSITION TO 30x20 RETURN AIR DUCT ROUTED TIGHT TO ROOF TRUSSES ABOVE. COORDINATE INSTALLATION WITH ALL TRADES. CEILING SPACE WILL BE CRITICAL IN THIS AREA. COORDINATE EXACT DUCT DROP WITH RTU SPECIFICATION AND ORIENTATION.

NOT USED F

KEY NOTES B

Installation, Start Up and Pre-Commissioning Checklist

= Responsible Party
Initial When Completed

Standard Unit eFlex	Reference #	GC - General Contractor	EC - Electrical Contractor	MC-Mechanical Contractor	PC-Plumbing Contractor	AB-Air Balance Agency	Remarks
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PROCESS

	1						
X	2						Reference and abide to all instructions in manufacturers Installation, Startup, Operation and Maintenance literature
X	3						Units are set level
X	4						Unit and plenums align to each other
X	5						Units and plenums are properly sealed to each other
X	6						All loose shipped components are relocated and installed per manufacturers instructions
X	7						a) economizer eyebrow, skirts and mist eliminator installed
X	8						b) economizer dampers and linkage installed and operable
X	9						c) economizer wiring connected and completed
X	10						d) relief damper or power exhauster installed and operable
X	11						e) smoke detectors and sample tubes relocated and installed per manufacturers instructions
X	12						Utilities are installed and ON to the units
X	13						a) power on and breakers sized to unit rating
X	14						b) phases correct
X	15						c) gas on
X	16						d) gas gooseneck or pipe capacity meets or exceeds unit capacity
X	17						e) condensate line is piped per plan
X	18						f) condensate vent is on leaving side of trap
X	19						Discharge Temperature Limit potentiometer is set to the 9 o'clock position
X	20						No thermostat, smoke detector, remote enunciator or any other wiring runs through the plenums
X	21						Manufacturers start up procedure has been followed and all units evaporator fan operates through all fan stages per manufacturers
X	22						Manufacturers start up procedure has been followed and all units cycle through all heating stages per manufacturers instructions
X	23						Manufacturers start up procedure has been followed and all units cycle through all cooling stages per manufacturers instructions
X	24						Manufacturers start up procedure has been followed and all units cycle through all economizer stages per manufacturers instructions
	25						
	26						
	27						
	28						Ductwork
X	29						All ductwork and registers are installed per plan
X	30						All starters and or take offs are radiused per plan.
X	31						Ductwork from the exhaust register over production line to EF-2 fan base is 100% rigid per plan
X	32						Balance dampers are in sleeves on axles with locking quadrant, not located in any starter collars, "T"s or "Y"s and located per plan
X	33						Balance damper handles are flagged to identify their location
	34						
	35						
	36						Economizer
X	37						All mechanical components related to the economizer have been installed
X	38						"Blank off" plate under economizer eyebrow has been installed
X	39						Barometric relief damper operates freely
X	40						Input sensors for the Economizer have been properly located and connected to the Economizer
X	41						Economizer has been tested to perform "Free" cooling when ambient conditions are below 55 degrees
X	42						Mechanical cooling stages on when Economizer cooling is not available
X	43						Mechanical cooling stages on with the Economizer cooling when
X	44						Economizer damper positions to minimum damper position when set
	45						
	46						
	47						Smoke Detectors
X	48						Smoke detector option has been included in package unit
X	49						Return side smoke detector has been relocated from its shipping position to the factory provided installation location in the return section of the package unit
X	50						All smoke detector sample tubes are properly located per manufacturers design
X	51						The return smoke detector in each unit has been tested for unit shutdown
X	52						The supply smoke detector in each unit has been tested for unit shutdown
	53						
	54						Remote Smoke Detector Enunciators and Resets
X	55						A remote smoke detector enunciator and reset has been installed in the managers office for each package unit
X	56						RTU 1 supply side smoke detector alarm sets off the visual and audible
X	57						After triggering RTU 1 supply side smoke detector alarm, resetting the remote smoke detector reset for RTU 1 returns RTU 1 to normal operation
X	58						RTU 1 return side smoke detector alarm sets off the visual and audible remote enunciator alarms and shuts down RTU 1
X	59						After triggering RTU 1 return side smoke detector alarm, resetting the remote smoke detector reset for RTU 1 returns RTU 1 to normal operation
X	60						RTU 2 supply side smoke detector alarm sets off the visual and audible remote enunciator alarms and shuts down RTU 2
X	61						After triggering RTU 2 supply side smoke detector alarm, resetting the remote smoke detector reset for RTU 2 returns RTU 2 to normal operation
X	62						RTU 2 return side smoke detector alarm sets off the visual and audible remote enunciator alarms and shuts down RTU 2
X	63						After triggering RTU 2 return side smoke detector alarm, resetting the remote smoke detector reset for RTU 2 returns RTU 2 to normal operation
	64						
	65						
	66						
	67						
	68						

Installation, Start Up and Pre-Commissioning Checklist

= Responsible Party
Initial When Completed

Standard Unit eFlex	Reference #	GC - General Contractor	EC - Electrical Contractor	MC-Mechanical Contractor	PC-Plumbing Contractor	AB-Air Balance Agency	Remarks
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PROCESS

	69						Zonesensor
X	70						Baysens 135 Zonesensor is installed
X	71						Zonesensor to unit wiring is landed on proper terminals per detail
X	72						Remote sensor wiring is landed on proper terminals (8 and 9) of Zonesensor per detail
X	73						Jumper on back of Zonesensor is configured for remote sensor
X	74						Zonesensor is set up for eFlex operation
X	75						a) Fahrenheit selected
X	76						b) Whole degrees selected
X	77						c) Dual Setpoint selected
X	78						d) Heat/Cool/Auto/Off selected
X	79						e) Occupancy (Timed Override) Disabled
X	80						Zonesensor is programmed to Taco Bell parameters
	81						
	82						Thermostat
X	83						Thermostats are wired to package units per thermostat and unit wiring diagrams
X	84						Package units equipped with two stage cooling have each cooling stage individually wired and controled from their thermostat.
X	85						Package units equipped with two stage heating have each heating stage individually wired and controled from their thermostat.
X	86						Thermostats are wired to Interlock Control Box per Detail on plan sheet E-6
X	87						Thermostats are programmed to Taco Bell parameters
	88						Hoodstat
X	89						Hoodstat has been installed in duct or hood per plan
X	90						Hoodstat is wired to terminals 1 and 2 of the Interlock Control Box
X	91						Hoodstat microswitch closes at 85 degrees
	92						
	93						
	94						Interlock
X	95						Unswitched power is provided to H=HOT and N=Neutral terminals in the Control Box
X	96						Hoodstat wires are landed on terminals 1 and 2 of the Control Box
X	97						Terminal 16 of Control Box is wired to terminal 11 of RTU 1 RTRM (J6)
X	98						Terminal 17 of Control Box is wired to terminal 12 of RTU 1 RTRM (J6)
X	99						Terminal 19 of Control Box is wired to terminal 11 of RTU 2 RTRM (J6)
X	100						Terminal 20 of Control Box is wired to terminal 12 of RTU 2 RTRM (J6)
X	101						"Occupied" switch is installed so that it is "Hot" when switch is in "Unoccupied or OFF" position and landed on terminal 7 of the Control Box
X	102						"Occupied" switch in "ON" position activates Kitchen Lights, EF-1, RTU 1 and "Occupied" switch in "OFF" position turns off Kitchen Lights, Dining Room lights, EF-2 and starts time delayed off of EF-1 and RTU 1 & 2 evaporator fans (subject to Hoodstat and or Zonesensor override)
X	103						
	104						
	105						
	106						
	107						Ansul Shutdown
X	108						Metal jumper clip on EPO terminals 5 and 6 of RTU 2 LTB 1 has been removed
X	109						Terminals 5 and 6 of RTU 2 LTB 1 are wired to "Closed when Cocked" Upon activation of the fire suppression system discharge (microswitch opens) RTU 2 immediately shuts off
X	110						
	111						
	112						
	113						
	114						Lighting
X	115						A 3 way switch, installed as a single switch and open in the UP throw position, has been installed as an "Occupied" switch in the managers office
X	116						Up position of "Occupied" switch activates kitchen lighting via Control Box
X	117						Up position of "Occupied" switch provides power, via the Control Box, to the Dining Room light switch in the managers office
X	118						Photocell is wired to the Greengate Box per detail
X	119						Exterior lights are wired to the Greengate Box per detail
X	120						Sign lights are wired to the Greengate Box per detail
X	121						Greengate Box is programmed to Taco Bell parameters
X	122						Manual override of Greengate box activates lighting circuits
	123						
	124						
	125						
	126						
	127						Air Balance Supplement
X	128						Balancing performed in accordance to ASHRAE Standard 111-2008, NEBB, TABB or AABC standards
X	129						Perform full fan speed adjustments after exhaust fan adjustments and supply air distribution adjustments have been made
X	130						Perform outside air adjustment after all other balance adjustments are complete
X	131						Perform outside air adjustment at full evaporator fan speed operating point
X	132						Perform outside air adjustment at medium fan speed operating point
X	133						Perform outside air adjustment at low fan speed operating point
X	134						Verify lobby doors closures have been adjusted for ADA compliance
X	135						Verify lobby doors closure operation during full economizer function of both package units and note result in air balance report
X	136						Verify pressure relief system operation in full economizer operation
X	137						Adjust power exhauster "ON" and "OFF" positions to mitigate door closure issues. Note if no power exhauster is available.
X	138						Provide copy of air balance report to Commissioning Agent
	139						
	140						
	141						
	142						

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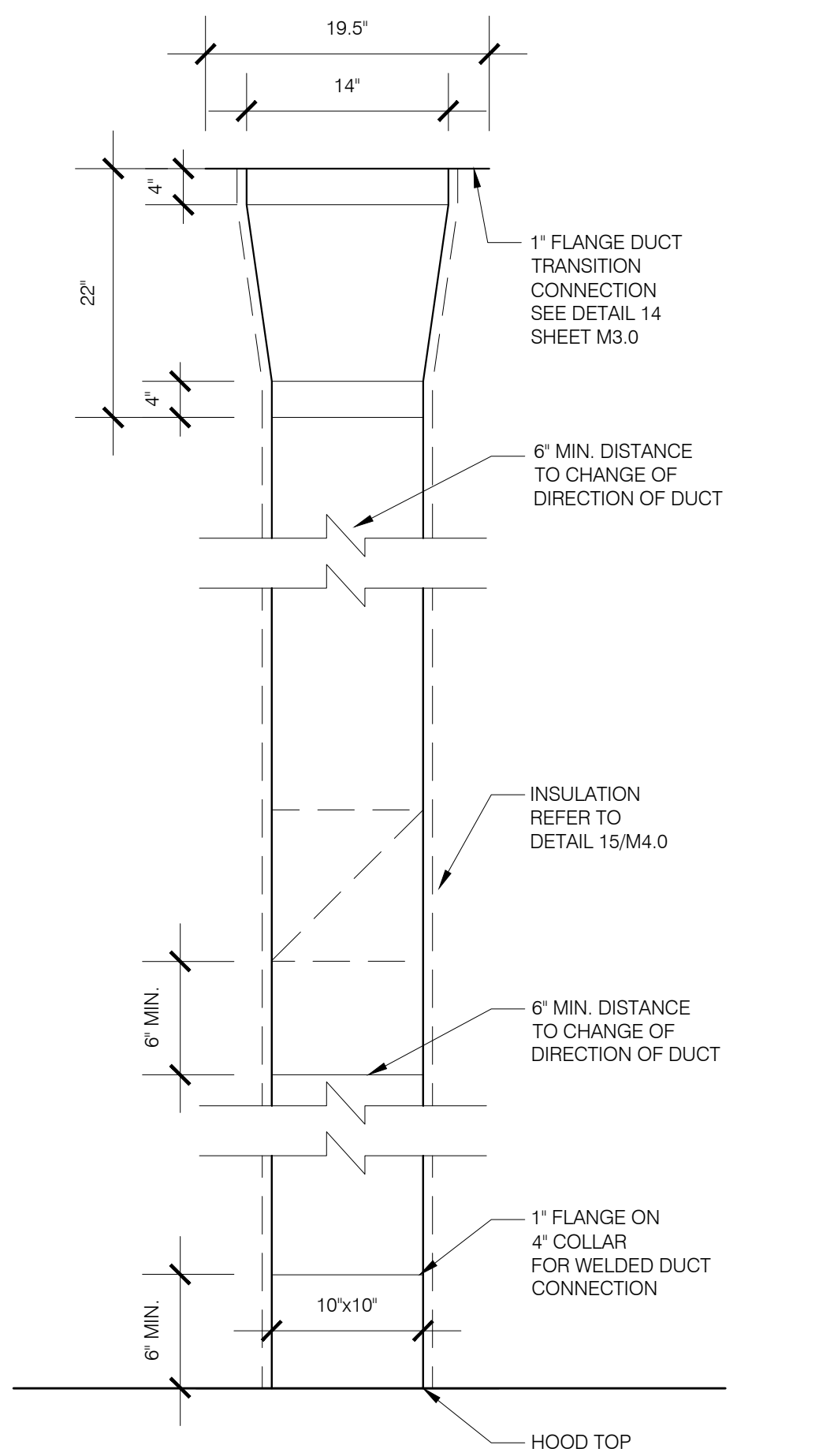
CONTRACT DATE: 03.16.23
BUILDING TYPE: ENDEAVOR 2.0
PLAN VERSION:
SITE NUMBER: TBD
STORE NUMBER: TBD

TACO BELL
1239 North Road Street
Elizabeth City, North Carolina 27909

ENDEAVOR 2.0
LARGE 50
INSTALLATION START-UP PRE-COMM CHECK LIST

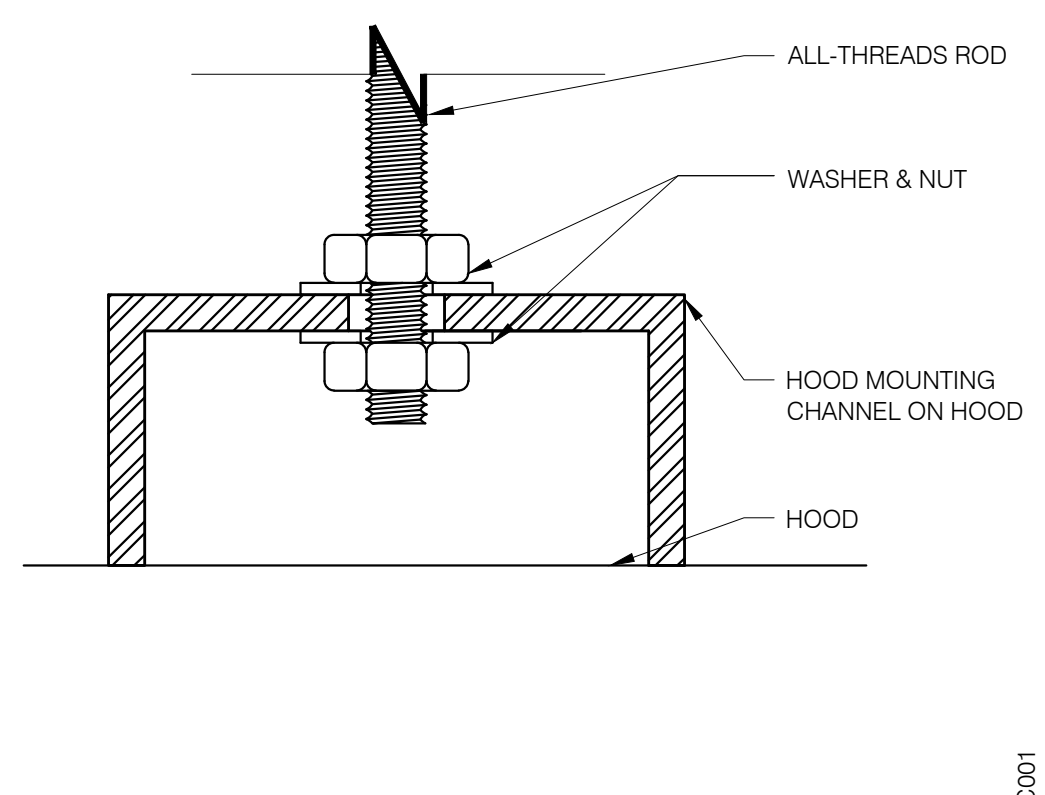
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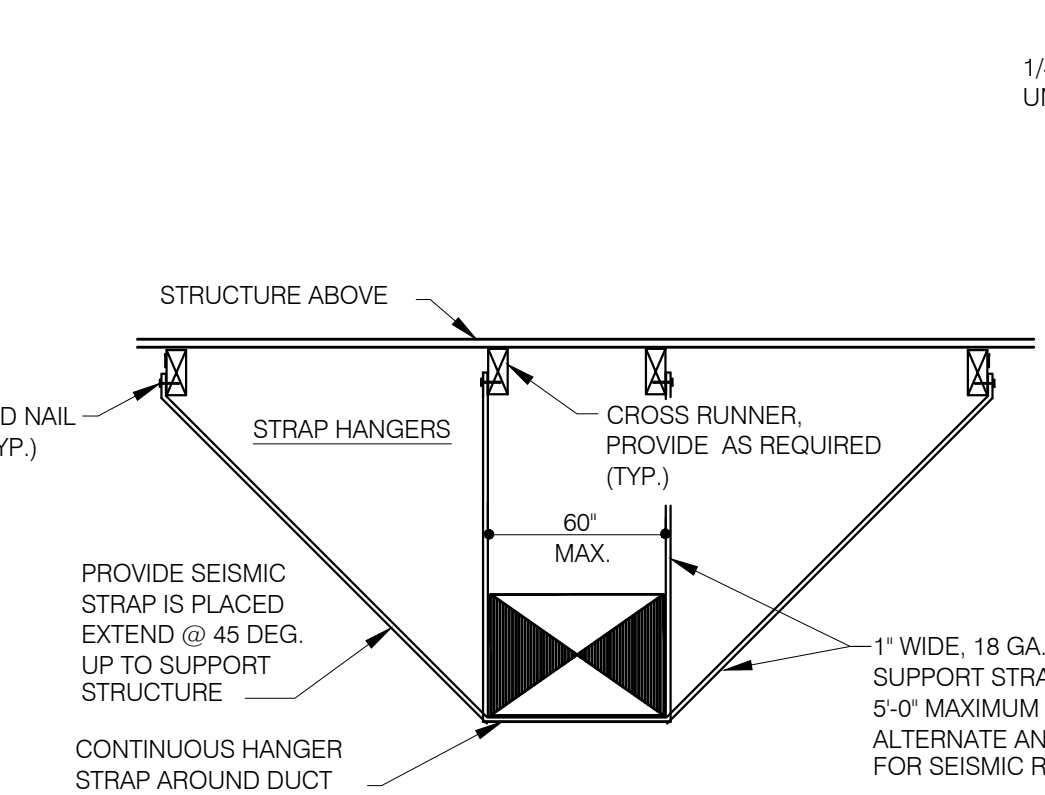
TB HOOD DUCT TRANSITION N.T.S. **18**

NOT USED **13**

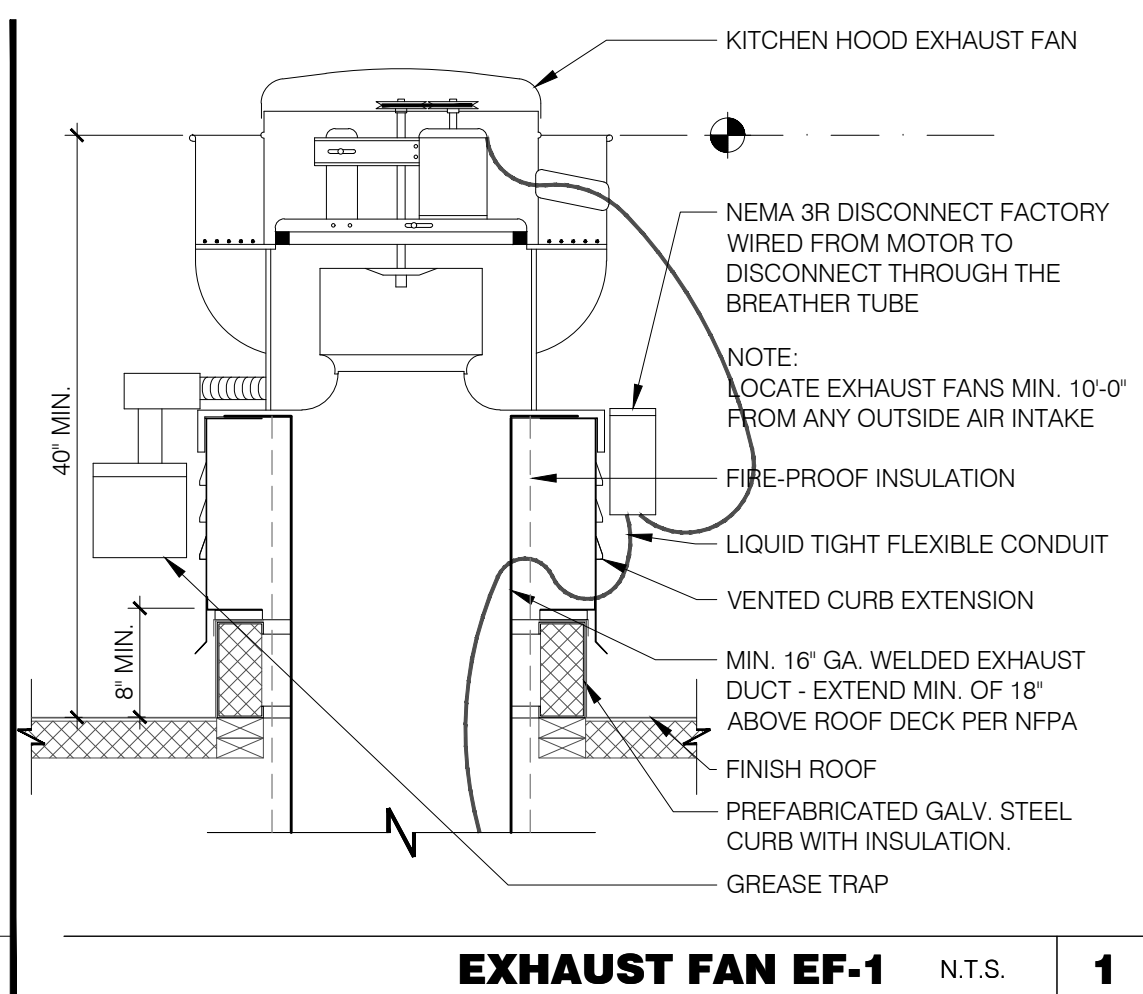


BOLT CONNECTION TO HOOD N.T.S. **14**

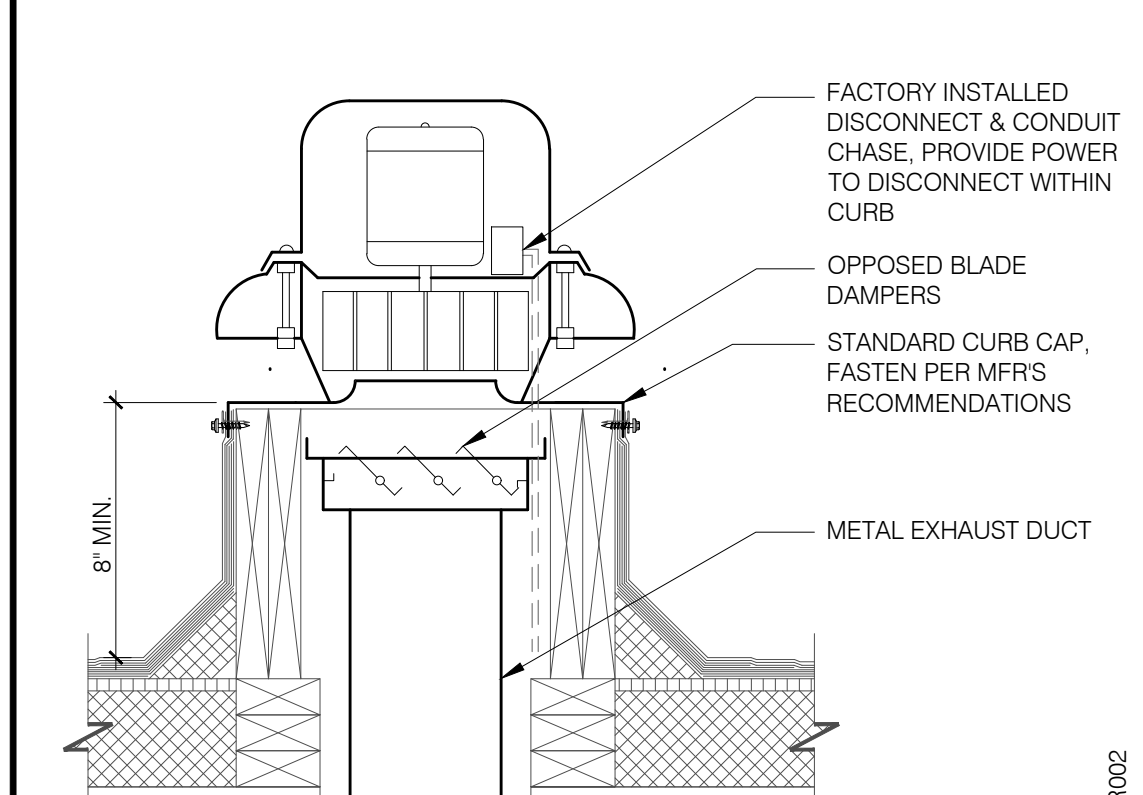
NOT USED N.T.S. **9**



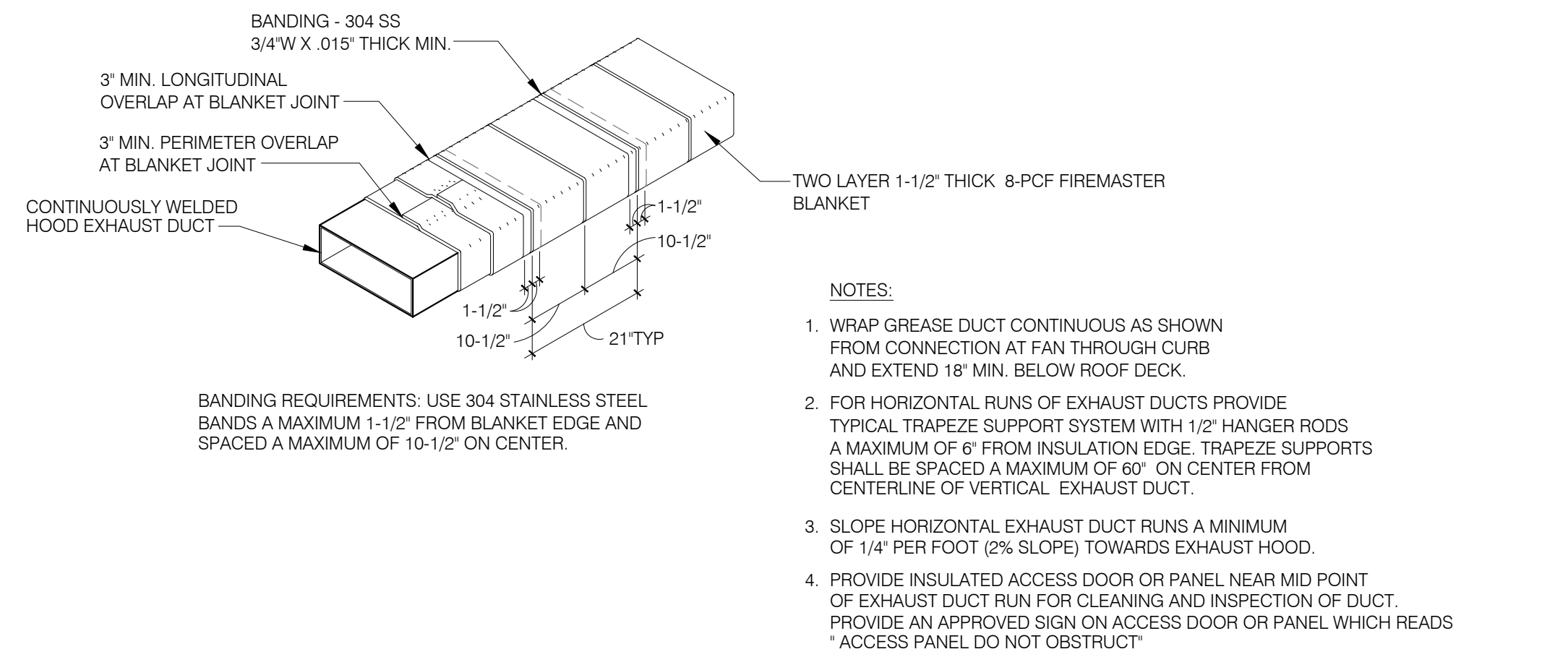
DUCT SUPPORT DETAIL N.T.S. **6**



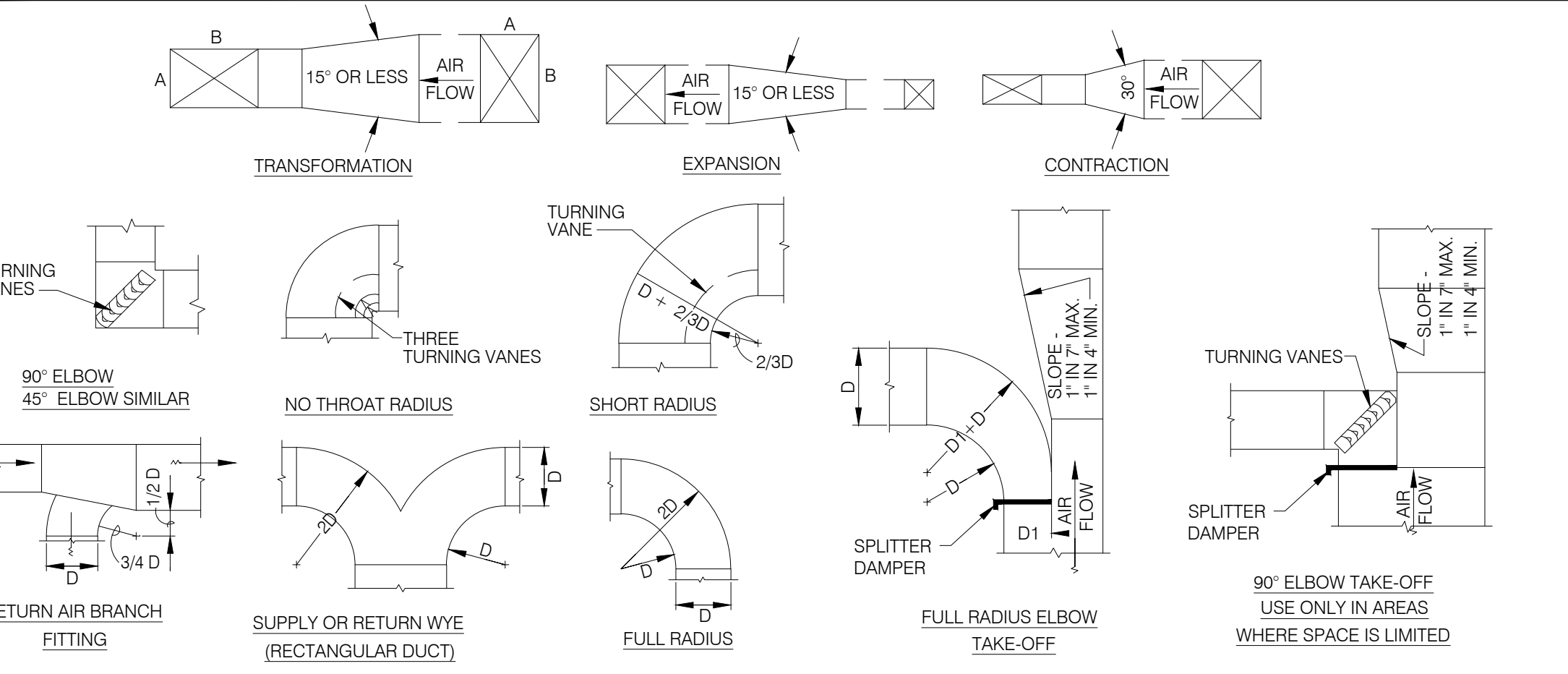
EXHAUST FAN EF-1 N.T.S. **1**



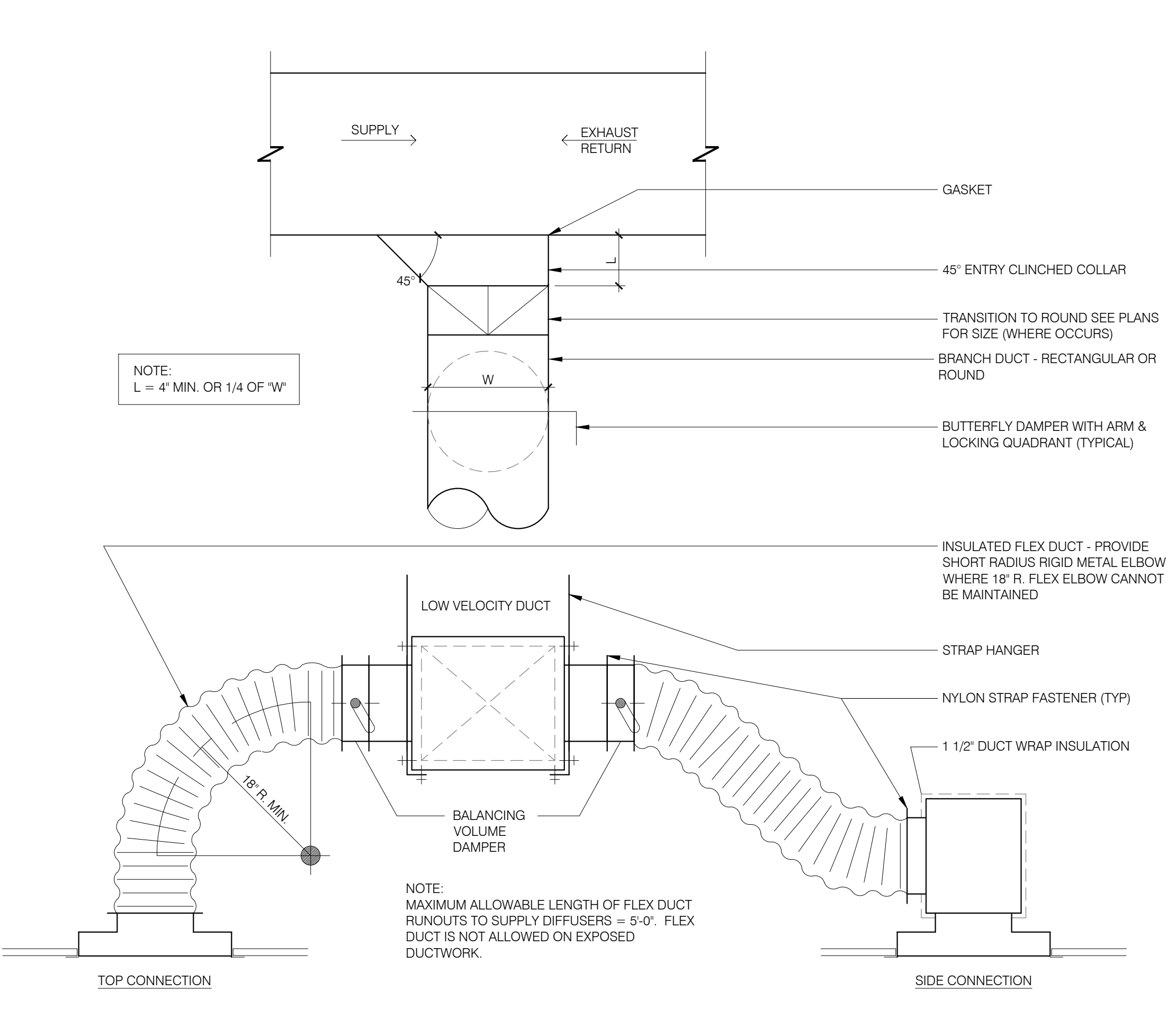
RESTROOM FAN (EF-2) N.T.S. **2**



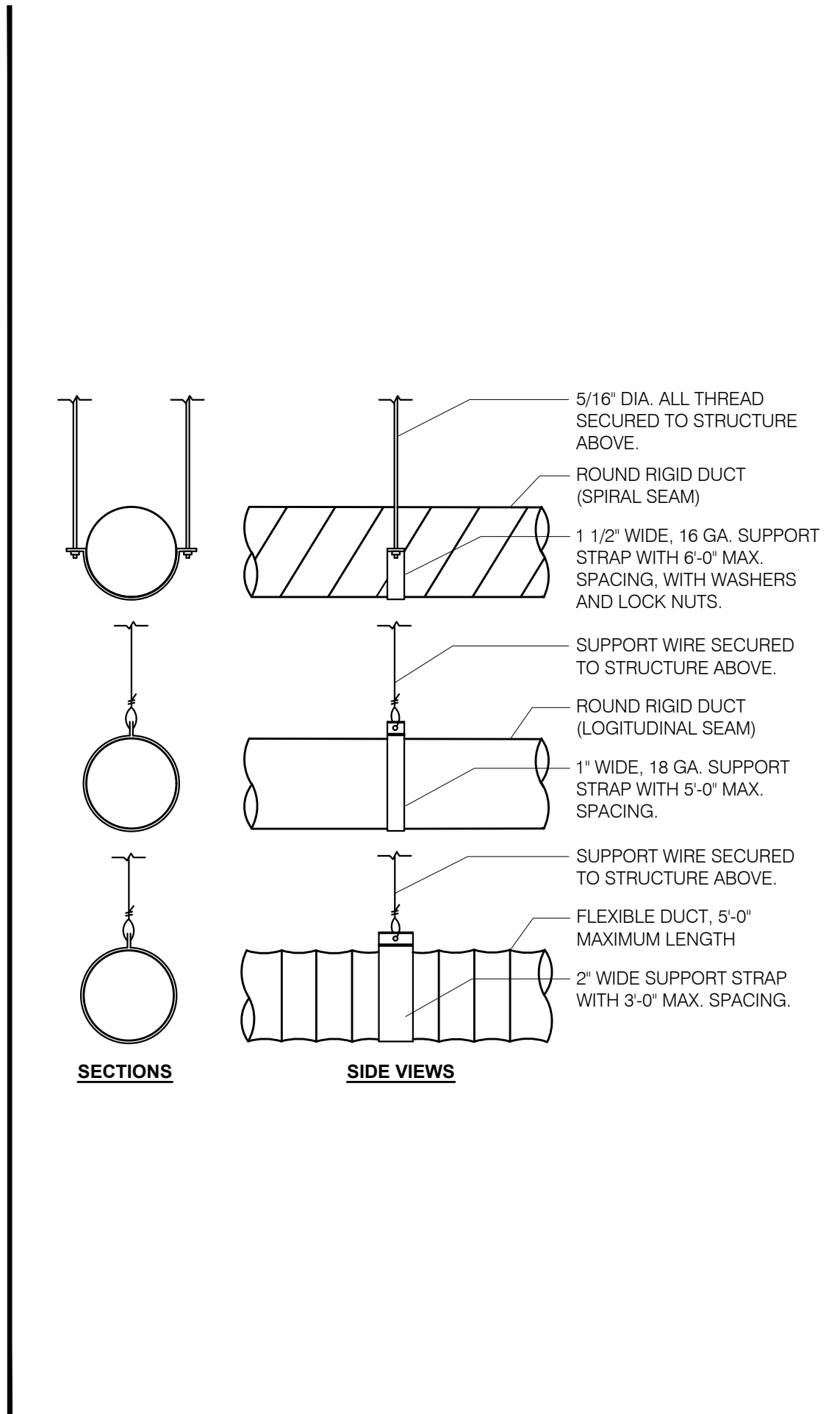
KITCHEN HOOD EXHAUST DUCT SYSTEM DETAIL N.T.S. **15**



TYPICAL DUCTWORK DETAILS N.T.S. **16**



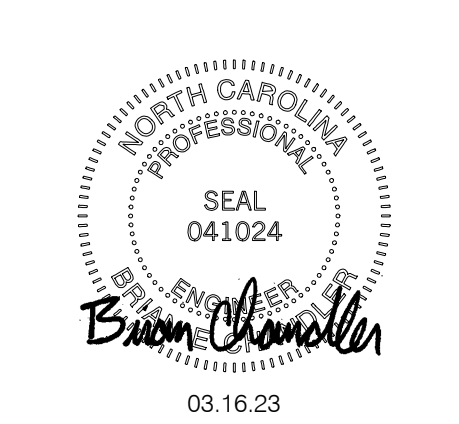
CEILING DIFFUSER CONNECTIONS N.T.S. **8**



DUCT SUPPORT DETAIL N.T.S. **4**

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MECHANICAL AND HOOD DETAILS

M4.0

PERMIT PLOT DATE: