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
- PROVIDE FRAMING REQUIRED FOR DIFFUSER INSTALLATION IN HARD CEILING.

HVAC:

- INSTALLATION SHALL CONFORM TO MECHANICAL AND ENERGY CODES 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. REFER TO SHEETS E3.0 ELECTRICAL POWER PLAN, SHEET E3.2-ELECTRICAL POWER ROOF PLAN, E6.0 - ELECTRICAL DETAILS - TBCCB, E6.1 - ELECTRICAL DETAILS - TBCCB, E7.0 - ELECTRICAL DETAILS, E7.1 - ELECTRICAL DETAILS.
- PROVIDE 24V CONTROL WIRING AND FINAL CONNECTIONS. EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN 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. REFER TO ELECTRICAL DRAWINGS SHEETS E6.1 AND E7.1 FOR ADDITIONAL LOW VOLTAGE WIRING AND CONNECTIONS.
- PROVIDE ALL REFRIGERANT LINES FROM ICE MACHINE TO CONDENSER ON ROOF AND CHARGE LINES PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
- HVAC UNITS SHALL BE MOUNTED LEVEL ON ROOF CURBS.
- SUPPLY / RETURN DUCTWORK SHALL BE EXTERNALLY INSULATED. ALL RETURN AND SUPPLY DUCT RISERS SHALL BE LINED (NOT WRAPPED).
- SUPPLY / RETURN DUCTS SHALL BE RIGID (EXCEPT AS NOTED/INDICATED AS RIGID ON THE DUCT PLAN), WITH THE EXCEPTION OF THE LAST 5'-0", WHICH MAY UTILIZE FLEXIBLE DUCT. ALL EXHAUST DUCT SHALL BE RIGID. ROOFTOP UNITS SHALL BE ORDERED WITH FACTORY SUPPLIED AND INSTALLED RETURN SMOKE DETECTORS. WHEN REQUIRED BY MANUFACTURER, SAMPLE TUBE SHALL BE LOCATED PER FIELD INSTALLATION
- INSTRUCTIONS. DETECTOR SHALL DEACTIVATE ROOFTOP UNIT UPON SENSING SMOKE. INCLUDE SUPPLY SMOKE DETECTOR ONLY IF REQUIRED BY LOCAL CODE.
- 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. PROVIDE TRANSITION AT TERMINATION OF TYPE 1 EXHAUST DUCT TO TOP OF FAN BASE. TRANSITION SHALL BE CENTERED AND HAVE MINIMUM OF 1" PER FOOT SLOPE.
- BRANCH DUCTS FEEDING INDIVIDUAL DIFFUSERS SHALL HAVE DAMPERS AT BRANCH FEEDER. DAMPER SHALL BE MINIMUM 26 GAUGE LOCATED IN DEDICATED SLEEVE WITH AXLE AND LOCKING QUADRANT. DAMPERS
- OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10'-0" FROM EXHAUST FANS AND VENTS.
- SEE M1.0 AND SCOPE OF WORK FOR DESCRIPTION OF HVAC PACKAGE TO BE PURCHASED THROUGH YUM! BRANDS NATIONAL CONTRACT.

SHALL NOT BE INSTALLED IN STARTER COLLARS. ALL DAMPER HANDLES SHALL HAVE A FLAG ON THE HANDLE FOR LOCATION PURPOSES.

- CONTRACTOR IS RESPONSIBLE FOR PROVIDING HVAC TEST & BALANCE REQUIRED FOR LOCAL AUTHORITY HAVING JURISDICTION, CERTIFICATE OF OCCUPANCY, BUILDING FINAL, ETC.
- FINAL HVAC SYSTEM TESTING AND BALANCING, AND COMMISSIONING SHALL BE PERFORMED BY INDEPENDENT AGENT. INDEPENDENT AGENT CONTRACTED DIRECTLY BY THE OWNER IS SCHEDULED AND PAID FOR (FRANCHISEE STORES) BY GENERAL CONTRACTOR (CORPORATE STORES ARE DIRECT BILLED TO TACO BELL)". CONTRACTOR SHALL CERTIFY COMPLETION OF INSTALLATION, START UP AND PRE-COMMISSIONING CHECKLIST SHOWN ON SHEET SW2.0 BEFORE SCHEDULING OWNER 'S INDEPENDENT AGENT. A RE-TEST IS MANDATORY FOR A FALSE START (I.E. NO POWER UPON AGENT'S ARRIVAL, EQUIPMENT NOT WIRED, COMPLETED. STARTED, ETC.) AND SHALL BE 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 SHALL BE INCURRED BY THE GENERAL CONTRACTOR.

INDEPENDENT AGENTS:

- Air Care Experts
- TAB@ACE-IAQ.COM 949 770-2222
- WIRE ALL SMOKE DETECTORS IN RTU TO ITS RESPECTIVE REMOTE ANNUCIATOR/RESET SWITCH. INSTALL "SYSTEM SENSOR" MODEL RTS2AOS. MOUNT NEXT TO THERMOSTATS @ 48" A.F.F. INSTALL PER MANUFACTURER
- REFERENCE RTU TO TBCCB CONNECTIONS PER E6.1.
- RTU MANUFACTURER FURNISHED THERMOSTATS SHALL BE CAPABLE OF RECIEVING AN EXTERNAL "OCCUPIED" SIGNAL.
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR LOW VOLTAGE CONNECTIONS.
- REFERENCE RTU TO TBANS CONNECTIONS PER E7.1. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR LOW VOLTAGE CONNECTIONS.
- LOW VOLTAGE CONNECTIONS TO SMOKE DETECTORS, REMOTE ANNUCIATORS AND RESETS, HUMIDISTATS, THERMOSTATS, REMOTE SENSORS, TBCCB AND TBANS REQUIRE VISUAL INSTALLATION VERIFICATION CERTIFICATE. CONTACT CERTIFY@ACE-BCX.COM OR 949 770 2222 FOR CERTIFICATE. SEE SHEET SW2.0 CERTIFICATE.

				MECHANICAL NOTES	6
SYMBOL &	ABBREV.	DESCRIPTION	SYMBOL & ABBREV.	DESCRIPTION	
	SA/SUP	SUPPLY AIR (RISE/DROP)	A/C, AC	AIR CONDITIONING	
	RA/RET	RETURN AIR DUCT (RISE/DROP)	A.F.F.	ABOVE FINISHED FLOOR	
	EA/EXH	EXHAUST AIR DUCT (RISE/DROP)	BDD	BACK DRAFT DAMPER	
→	CD/SR	CEILING DIFFUSER/SUPPLY REGISTER (ARROWHEAD REPRESENTS NUMBER OF THROW)	CB CLG.	CIRCUIT BREAKER CEILING	
	RR/RG	RETURN REGISTER/GRILLE	CLG. CONN.	CONNECT/CONNECTION	
	ER/EG	EXHAUST REGISTER/GRILLE	CONT.	CONTINUATION	
			CFM	CUBIC FEET PER MINUTE	
	FLEX	FLEXIBLE DUCT (14'-0" MAXIMUM)	DISC.	DISCONNECT	
		ROUND DUCT ELBOW	EA	EXHAUST AIR	
		DOLIND DUOTWODY	EF	EXHAUST FAN	
		ROUND DUCTWORK	(E)	EXISTING	
	MCD	MANUAL VOLUME DAMPER	GA.	GAGE/GAUGE	
. <u>'</u>	IVICD		GC	GENERAL CONTRACTOR	
		DUCT TRANSITION (RECTANGULAR TO ROUND)	HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	
	TOTAT	DDOCDAMMADI E TUEDMOCTAT, DDOVIDED WITH LUVAC DACKACE	MFR.	MANUFACTURER	
(TS)	T-STAT	PROGRAMMABLE THERMOSTAT, PROVIDED WITH HVAC PACKAGE	MECH.	MECHANICAL	
(H)		THERMOSTAT SENSOR (REMOTE), PROVIDED WITH HVAC PACKAGE	OA	OUTSIDE AIR	
SD		HUMIDITY SENSOR (REMOTE), PROVIDED WITH HVAC PACKAGE SMOKE DETECTOR, PROVIDED WITH HVAC PACKAGE, MOUNTED IN UNIT	OBD	OPPOSED BLADE DAMPER	
			RA	RETURN AIR	
<u> </u>	D	CONDENSATE DRAIN	SA	SUPPLY AIR	
Ø	DIA.	DIAMETER	S/S	STAINLESS STEEL	
			TYP.	TYPICAL	
		MESUANISA ESUBMENT RESIGNATION			
(0000 X-X)		MECHANICAL EQUIPMENT DESIGNATION			
(R)	RESET	SMOKE DETECTOR RESET			

MECHANICAL SYMBOLS

				FAN	N DATA			CO	OLING CAPACIT	ΤΥ	-	HEATING CA	PACITY		ELE	CTRICAL	DATA			
									MIN CAP											
		AREA	SUPPLY	MIN. OA				NOMINAL	(MBH)			OUTPUT	HEATING		VOLTS/			WEIGHT	LENNOX	
	MARK	SERVED	CFM	CFM	ESP	HP	RPM	TONS	TOT/SEN	MIN EER	INPUT (MBH)	(MBH)	STAGES	AFUE %	PH	MCA (A)	MOCP (A)	(LBS.)	MODEL	NOTES
GREEN	RTU-1	DINING	2800	660	0.8	2	872	7.5	90.0/57.3	12.2	240	192	2	80	208/3	45	50	1336	LGH092H4M	1-14
	RTU-2	KITCHEN	6800	1050	1.0	5	1156	17.5	190.8/138.9	12.0	360	288	2	80	208/3	87	100	2560	LGH210H4B	1-14

SCHEDULE NOTES:

Mark

1050

REFER TO SCOPE OF WORK IN DIV 23

BALANCE & COMMISSIONING

THE GC.

SPECIFICATION FOR HVAC FOR TEST &

BY THE OWNER AND COORDINATED BY

REQUIREMENTS WHICH WILL BE SUPPLIED

MEALLANIAL MATEC

1. LISTED CAPACITY IS UNIT NET COOLING CAPACITY AT THE FOLLOWING CONDITIONS: RTU-1 - 80.6°F DB / 67.1°F WB EAT AND 105°F AMBIENT / RTU-2 - 78.0°F DB / 66.3°F WB EAT AND 105°F AMBIENT. OUTDOOR DESIGN CONDITION, SUMMER 87°F & 74°F WB, WINTER -10°F. THERMOSTAT SHALL BE PROGRAMMED FOR 73°F IN SUMMER AND 68°F IN WINTER WITH 2°F ADJ. FUNCTION UP OR DOWN. UNOCCUPIED HEATING SET POINT SHALL BE SET TO THE STORE SCHEDULE AND 60°F MINIMUM. SPECIFIED UNITS INCLUDE MINIMUM 2 STAGE COOLING FOR RTU-1 AND 3 STAGE COOLING FOR RTU-2, LOW AMBIENT CONTROL TO 0 DEG. F AND THROUGH THE ROOF CURB GAS AND POWER CONNECTIONS.

MODEL

#SVDU50HFA

#SVDR30HFA

MANUFACTURER

STRATOVENT

STRATOVENT

NOTES

1.3.5.6.7.8.10

2,4,7,8,9,10,11

- HINGED ACCESS DOORS (FACTORY PROVIDED). 2 INCH MERV 8 FILTERS (FACTORY PROVIDED).
- SINGLE ENTHALPY ECONOMIZER WITH WEATHER HOOD (FACTORY PROVIDED)
- 5. LOW LEAKAGE ECONOMIZER WITH FAULT DETECTION (FACTORY PROVIDED).
- 6. STANDARD STATIC POWER RELIEF/W HOOD (FACTORY PROVIDED). CIRCUIT BREAKER DISCONNECT SWITCH (FACTORY PROVIDED).
- 8. RETURN AIR SMOKE DETECTOR (FACTORY PROVIDED).
- 9. STANDARD CAP. (FACTORY PROVIDED) 10. PHASE MONITOR (FACTORY PROVIDED)
- 11. MULTI-STAGE AIR VOLUME (FACTORY PROVIDED).

CFM | ESP | RPM | HP |

EF-2 570 0.375 1025 1/4 120/1

0.9 | 1344 | 1/2 |

- 12. 18" ROOF CURB (FIELD INSTALLED).
- 13. COMFORT SENSE CS8500 THERMOSTAT AND REMOTE SENSOR (FIELD INSTALLED).

VOLTS/PH

120/1

DRIVE TYPE

DIRECT

DIRECT

14. GFCI SERVICE RECEPTACLE (FIELD WIRED, FACTORY INSTALLED).

HVAC	UNIT	SCHEDULE	

UL 762 LISTED (GREASE)

- UL 705 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
- FURNISHED BY OWNER WITH HOOD PACKAGE

FURNISHED WITH DAMPER TRAY

EXHAUST FAN SCHEDULE

		FACE SIZE OR	(NO.) & AIR							
MARK	NECK SIZE	GRID SIZE	PATTERN	TYPE	MAX FLOW (CFM)	MOUNTING	MATERIAL	MANUFACTURER	MODEL NUMBER	REMARKS
E-1	8"X8"	12"x12"	-	EXHAUST	200	SURFACE	ALUMINUM	METAL-AIRE / TITUS	CC5S-1/50F	FRN SQR TO RND ADAPTER
E-2	8"DIA	24"x24"	-	EXHAUST	300	SURFACE	ALUMINUM	METAL-AIRE / TITUS	CC5-FB-TB/50F-NT	FRN SQR TO RND ADAPTER
R-1	22"X22"	24"x24"	-	RETURN	2000	LAY-IN	ALUMINUM	METAL-AIRE / TITUS	RHE-6/50FF	HINGED/FULLY REMOVABLE FACE
R-2	22"X10"	24"x12"	-	RETURN	500	LAY-IN	ALUMINUM	METAL-AIRE / TITUS	RHE-6/50FF	HINGED/FULLY REMOVABLE FACE
R-3	22"X10"	24"x12"	-	RETURN	400	SURFACE	ALUMINUM	/TITUS	271L	
S-1	15"X15"	24"x24"	4W	SUPPLY	600	LAY-IN	ALUMINUM	METAL-AIRE / TITUS	5000-6 / TDC-AA-NT	FRN SQR TO RND ADAPTER
S-2	9"X9"	14"x14"	4W	SUPPLY	250	SURFACE	ALUMINUM	METAL-AIRE / TITUS	5000-1 / TDC-AA	FRN SQR TO RND ADAPTER
S-4	22"X22"	24"x24"	4W	SUPPLY	600	LAY-IN	MODULAR PLASTIC CORE	HART & COOLEY	RZMCDST	FRN SQR TO RND ADAPTER

1. SURFACE MOUNTED DIFFUSERS IN HARD CEILINGS SHALL BE PROVIDED WITH OPPOSED BLADE DAMPERS. SEE ARCHITECTURAL DRAWINGS FOR CEILING TYPES

AIR DEVICE SCHEDULE

TACO BELL HAS A NATIONAL HVAC AGREEMENT WITH LENNOX NATIONAL ACCOUNTS. FOR QUOTES & TECHNICAL SPECIFICATIONS CONTACT BY EMAIL AT YUM!@LENNOXIND.COM OR 800-367-6285 ACCOUNT MANAGER BRAD SMITH.

LENNOX HAS AGREED TO SUPPLY AN HVAC PACKAGE CONSISTING OF THE ROOF-TOP UNITS, CURBS, THERMOSTATS, TEMPERATURE SENSORS (REMOTE), AND HUMIDITY SENSORS (REMOTE). RTU'S AS SPECIFIED INCLUDE AN UNPOWERED CONVENIENCE OUTLET (SEE ELECTRICAL) AND AN HACR CIRCUIT BREAKER WHICH SERVES AS UNIT DISCONNECT.

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.

HVAC NATIONAL ACCOUNT NOTES

SEE THE SCOPE OF WORK SHEETS FOR ADDITIONAL INFORMATION.

ITEM	OA	RA	SA	EA	PRESSURE
EF-1				-1050	-1050
EF-2				-570	-570
RTU-1	660	2140	2800		+660
RTU-2	1050	5750	6800		+1050
TOTAL	1710	7890	9600	-1620	+90
·					

OUTSIDE PERCENTAGE OF TOTAL SUPPLY AIR IS 23.6% FOR RTU-1 AND 15.4% FOR RTU-2. ADJUST OUTSIDE AIR INTAKES TO MAINTAIN VALUES AT ALL EVAPORATOR FAN SPEEDS.



441 S. LIVERNOIS ROAD SUITE 265

2

ROCHESTER HILLS, MI 48307 PHONE (248) 524-4700 (248) 524-9746

PROJECT # 22002

	DATE	REMARKS
1	6/23/22	Bids & Permits
	1	

BUILDING TYPE: END. MED 40

CONTRACT DATE:

PLAN VERSION: MARCH 2021

BRAND DESIGNER SITE NUMBER:

STORE NUMBER

PA/PM: DRAWN BY.

3

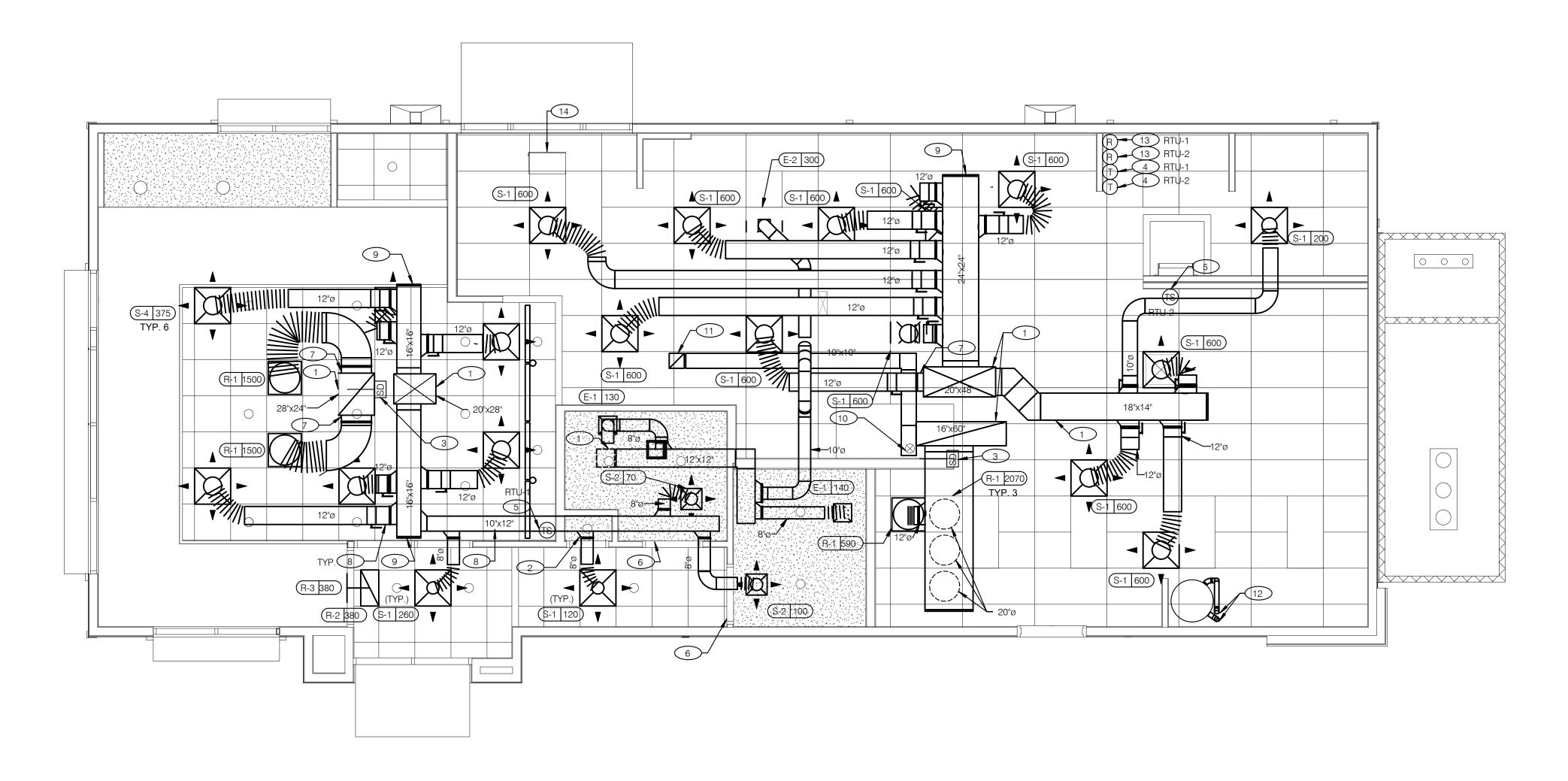
JOB NO.: **GREAT LAKES**

TACO, LLC 2717 Main Street (M-53) Marlette, Michigan 48453



ENDEAVOR 2.0 MECHANICAL SCHEDULES AND NOTES

AIR BALANCE SCHEDULE



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

DINING ROOM LIGHT FIXTURE LOCATIONS ARE CRITICAL. COORDINATE DUCTWORK LOCATIONS WITH LIGHTING AND STRUCTURAL.

GENERAL NOTES - MECHANICAL NTS

- THERMOSTATS SHALL BE PROGRAMMABLE THERMOSTAT WITH SUBBASE AND REMOTE TEMPERATURE SENSOR (PROVIDED WITH RTU PACKAGE).
- HUMIDITY SENSOR APPLICATION IS VARIABLE PER SITE SPECIFIC CONDITIONS. REFER TO HVAC UNIT SCHEDULE FOR APPLICATION CONDITIONS.

1 AIR DUCT UP TO UNIT.

- 2 SEE DETAIL 4 ON DRAWING M4.0 FOR SUPPLY AIR TAKE-OFF TO CEILING DIFFUSERS AND GRILLES.
- 3 FACTORY INSTALLED SMOKE DETECTOR MOUNTED IN ROOFTOP UNIT.
- 4 LOCATE THERMOSTAT CONTROLS ON WALL IN OFFICE AT 48" A.F.F. COORDINATE LOCATION WITH LIGHT SWITCHES AND OTHER WALL MOUNTED ACCESSORIES. RUN 24 VAC POWER AND SIGNAL CONDUCTORS IN TWO (2) SEPARATE TWO (2) CONDUCTOR CABLES, 18 AWG.
- MOUNT THERMOSTAT REMOTE SENSOR AT 60" ABOVE FINISHED FLOOR.
 CONNECT TO THERMOSTAT WITH 18 AWG 2 CONDUCTOR CABLE PER
 MANUFACTURER INSTALLATION INSTRUCTIONS. ENSURE THAT TEMPERATURE
 SENSOR IN DINING AREA IS NOT LOCATED ON TILE WALL.
- 6 UNDERCUT RESTROOM DOORS MINIMUM 3/4" FOR MAKE-UP AIR.
- 7 PROVIDE SHOE TAP AT CONNECTION TO DUCT DROP FROM ROOFTOP UNIT.
- 8 RUN DUCT THROUGH OPEN WEBBING OF ROOF TRUSSES (WHERE POSSIBLE). COORDINATE WITH TRUSS DESIGN PRIOR TO DUCTWORK FABRICATION.
- 9 RUN DUCTWORK BETWEEN TRUSSES AS HIGH AS POSSIBLE UNDER ROOF JOISTS.
- 10 10"X10" EXHAUST AIR DUCT DOWN AND TRANSITION TO FIELD CUT EXHAUST CONNECTION AT HOOD.
- 11 EXHAUST DUCT SHALL RUN BETWEEN ROOF JOISTS TO CONNECT TO ROOF EXHAUST FAN EF-1. SEE HOOD DETAILS ON DRAWING M3.0. SEE DETAIL 10 ON SHEET M4.0 FOR FIRE PROTECTION OF DUCT WORK. SEE DETAIL 11 ON SHEET M4.0 FOR EXHAUST DUCT TRANSITION.

DUCT AND DIFFUSER PLAN 1/4" = 1'-0" A

- PROVIDE 3" PVC WATER HEATER INTAKE AND FLUE VENT. TERMINATION ON ROOF. COORDINATE WORK WITH ALL TRADES.
- PROVIDE SMOKE DETECTOR RESET SWITCH WITH KEY. RESET SWITCH SHALL BE "SYSTEM SENSOR" MODEL # RT5151 KEY. MOUNT NEXT TO THERMOSTATS @ 48" A.F.F. INSTALL PER MANUFACTURER'S REQUIREMENTS.
- 14 PROVIDE AIR CURTAIN IN LOCATION AS SHOWN ON PLAN. MOUNT AIR CURTAIN ON MULLION DIRECTLY ABOVE SERVICE OPENING DOORS AT DRIVE-THRU WINDOW. AIR CURTAIN SHALL BE BERNER MODEL DTU03-2026A, WITH 120/1/60 POWER CONNECTION. REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS FOR MORE DETAILS.



EAM Engineers, Inc.

Electrical and Mechanical Consulting Engineers

180 High Oak Road, Bloomfield Hills, MI 48304
Phone 248.528.2670 Fax 248.528.1642

www.eam-engineers.com

eam@eam-engineers.com

Job No.: 273-22060



ARCHITECTS INC. A.I.A

SUITE 265 ROCHESTER HILLS, MI 48307

(248) 524-4700 (248) 524-9746

PROJECT # 22002

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CONTRACT DATE:

BUILDING TYPE: END. MED 40

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JOB NO.:

GREAT LAKES TACO, LLC

2717 Main Street (M-53) Marlette, Michigan 48453



ENDEAVOR 2.0

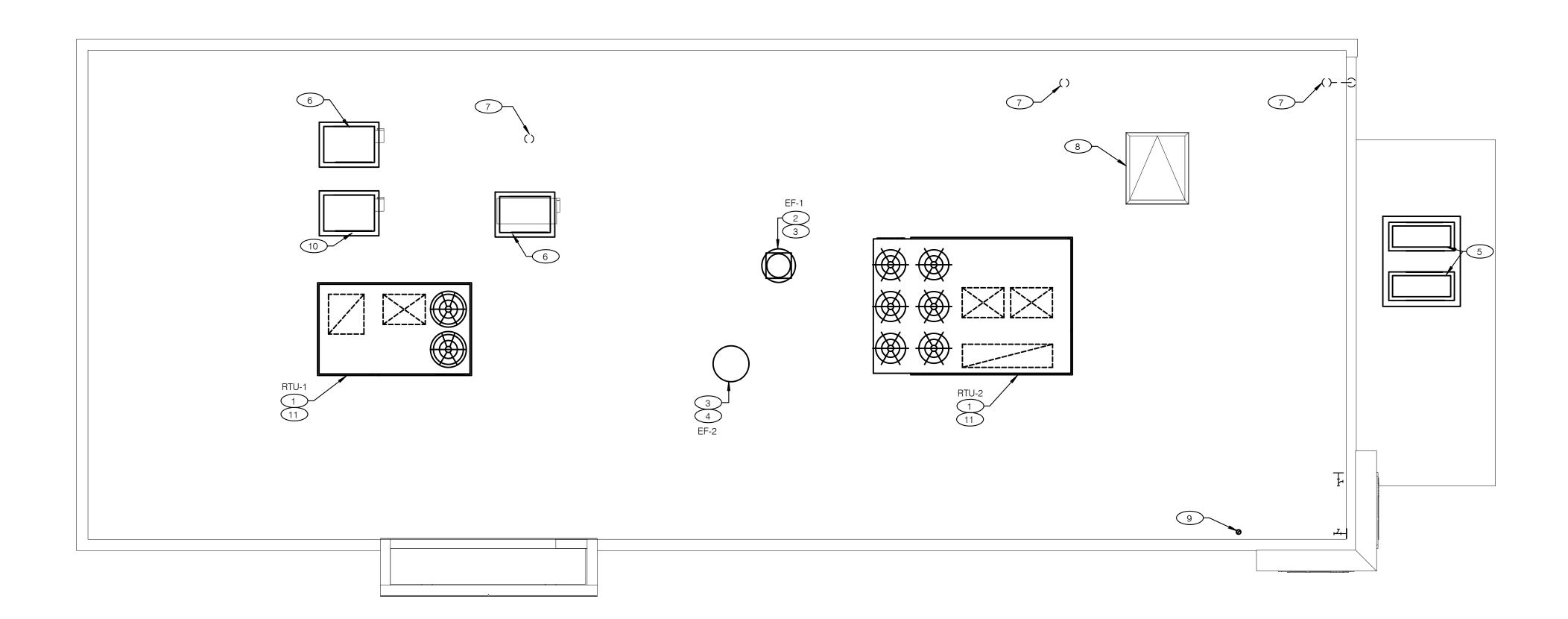
DUCT AND

DIFFUSER PLAN

M20

IVIZ.U

B



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

MECHANICAL ROOF PLAN 1/4" = 1'-0"

- 2 PROVIDE TYPE I EXHAUST FAN IN LOCATION AS SHOWN PLANS. CONNECT 10"x10" EXHAUST DUCT FROM EXHAUST HOOD UP TO EF-1 ON ROOF. COORDINATION EXHAUST DUCT ROUTING WITH STRUCTURAL TRUSS LAYOUT.

1 PROVIDE RTU IN LOCATION AS SHOWN ON PLANS. COORDINATE EXACT RTU LOCATION

CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND EXHAUST TERMINATIONS.

AND DUCT DROPS WITH STRUCTURAL TRUSS LAYOUT. MAINTAIN MINIMUM 10'-0"

- 3 COORDINATE EXHAUST FAN LOCATION WITH ROOFTOP UNIT. MAINTAIN ROOFTOP UNIT MANUFACTURER'S REQUIRED CLEARANCE AND MINIMUM 10 FT TO ROOFTOP UNIT'S OUTSIDE AIR INTAKE.
- PROVIDE EXHAUST FAN IN LOCATION AS SHOWN PLANS. CONNECT 10"x10" EXHAUST DUCT FROM RESTROOM EXHAUST GRILLES TO EF-2 ON ROOF. COORDINATION EXHAUST DUCT ROUTING WITH STRUCTURAL TRUSS LAYOUT.
- 5 CONDENSING UNIT SERVING WALK-IN COOLER/FREEZER. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. CONTRACTOR TO FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.
- 6 CONDENSING UNIT SERVING ICE MAKER. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. CONTRACTOR TO FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.
- 7 PLUMBING VENT. REFERENCE 1/P2.0.
- 8 ROOF HATCH. REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
- 9 PROVIDE MANUFACTURER'S CONCENTRIC TERMINATION VENT KIT SERVING HOT WATER HEATER BELOW. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. ENSURE AT LEAST 10'-0" DISTANCE BETWEEN OUTDOOR AIR INTAKES.

- (10) CONDENSING UNIT SERVING FROZEN BEVERAGE MACHINE. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.
- 11 ALL UTILITY PIPING FOR RTU'S SHALL RUN UP THROUGH ROOF INSIDE EACH UNIT'S ROOF CURB.



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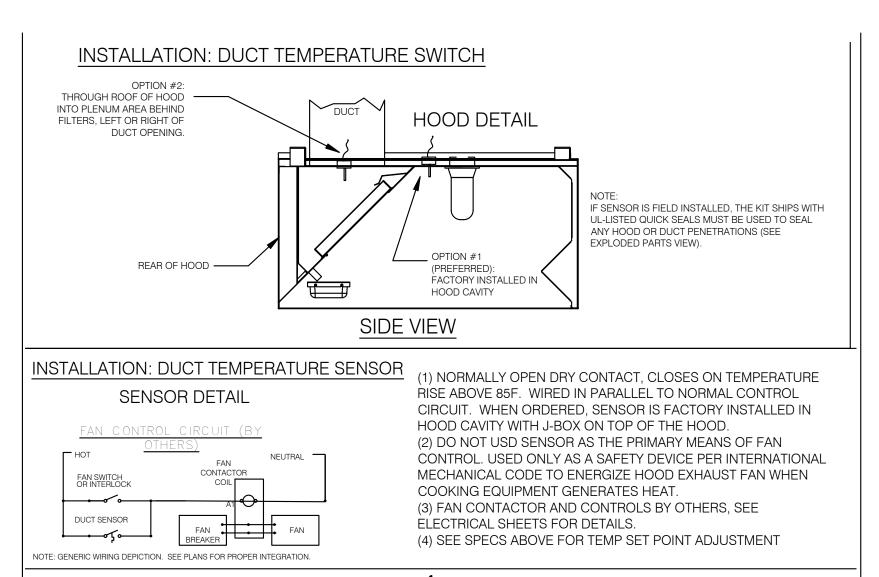
> **GREAT LAKES** TACO, LLC

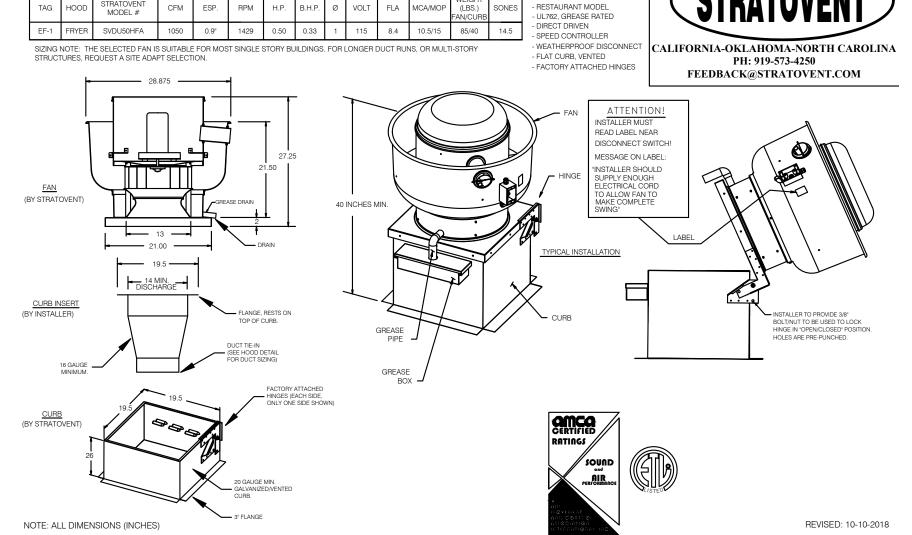
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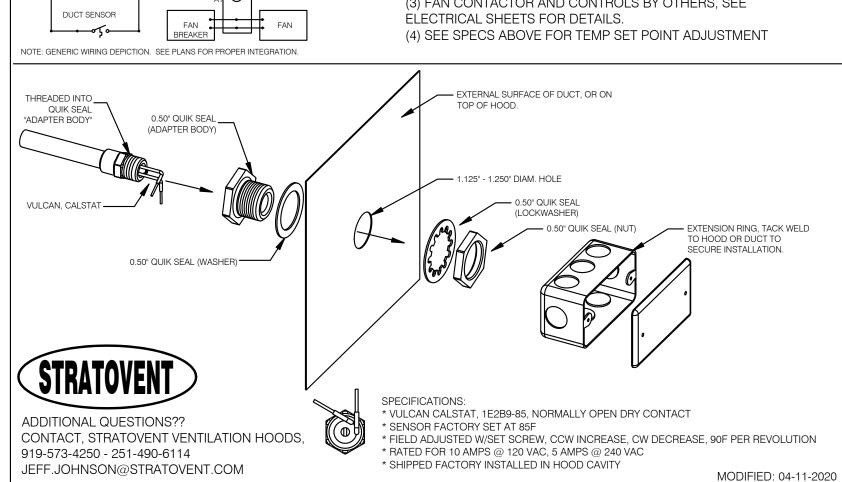
ENDEAVOR 2.0 MECHANICAL ROOF PLAN

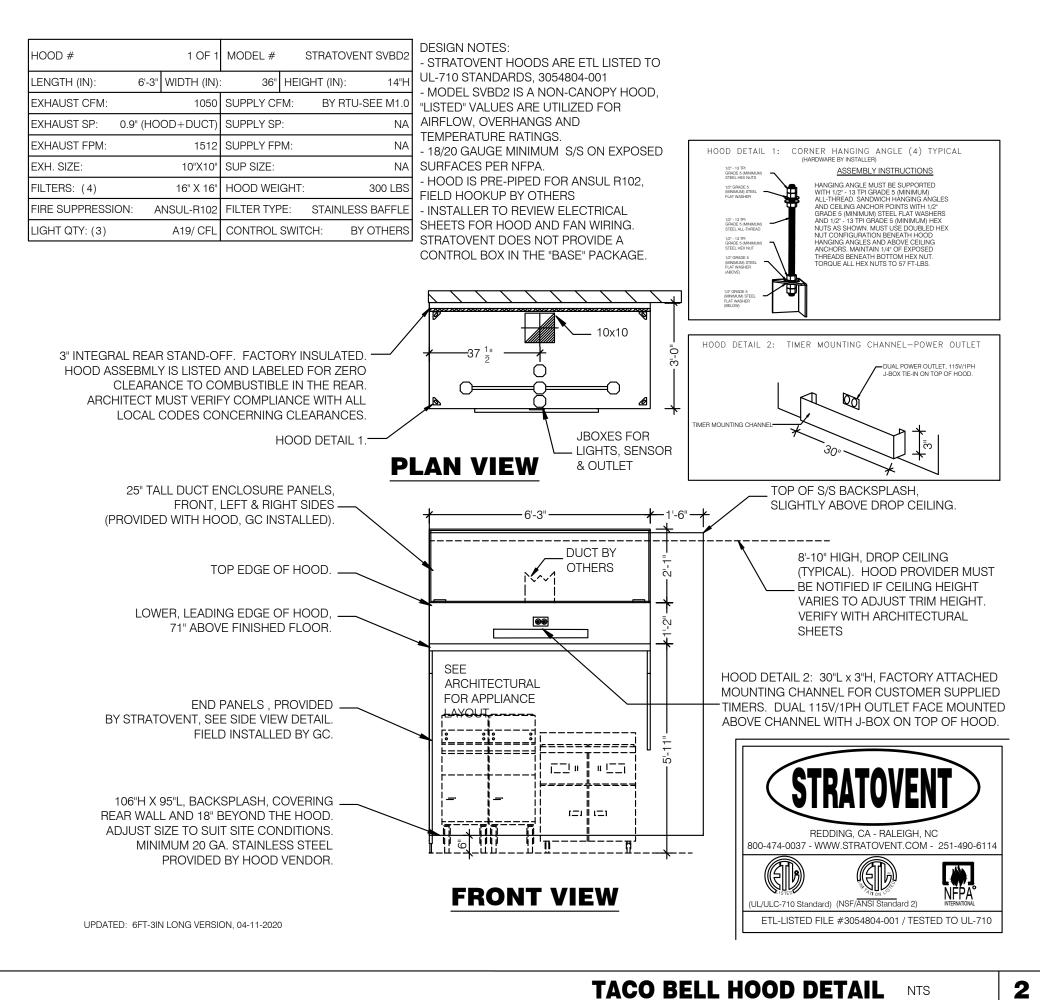
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STRATOVENT MODEL# SVDU50HFA





STRATOVENT HOODS

BUILT IN COMPLIANCE WITH

NFPA #96

NSF STANDARD #2

UL STANDARD 710 ETL FILE NO. 3054804-001

STATIC PRESSURE

3'-0"

SIDE VIEW

- NOTE, DEPICTED DUCT ROUTING IS GENERIC

ADJUST FAN SIZING TO MATCH REQUIRED

AND WILL VARY BASED ON SITE CONDITIONS.

EXHAUST FAN (EF 1

NON-CANOPY HOOD DESIGN BASED ON:

MANUFACTURER: STRATOVENT, MODEL SVBD2

MIN. "LISTED" AIRFLOW: 150 CFM PER LINEAR

MAX. COOK SURFACE FRONT UNDERHANG: - 3"

MAX. APPLIANCE COOKING TEMPERATURE: 450 F

HOOD DESIGN QUESTIONS?

STRATOVENT KITCHEN VENTILATION

PHONE: 251.490.6114

JEFF.JOHNSON@STRATOVENT.COM

DESIGN AIRFLOW: 168 CFM PER LINEAR FT

MIN. SIDE COOK SURFACE OVERHANG: 0"

MAX. DIST. ABOVE COOK SURFACE: 47"

- FIELD CUT OPENING BY INSTALLER, TRANSITION

PER PLANS. IF SELECTED, A HOOD MOUNTED

HEAT SENSOR WILL BE FACTORY INSTALLED IN

ROOF OF HOOD FOR AUTOMATIC ACTIVATION.

3" INTEGRAL REAR STAND-OFF, FACTORY

INSULATED. HOOD ASSEMBLY IS LISTED FOR ZERO CLEARANCE TO COMBUSTIBLE

IN THE REAR. COMPLIANCE WITH ALL

LOCAL CODES VERIFIED BY ARCHITECT.

26" X 26" END PANELS, SHIPPED LOOSE

- 20 GA. MIN S/S WALL PANEL COVERING

REAR WALL. EXTENDING 18" BEYOND

FULL END PANEL ON END OF HOOD

CLOSEST TO THE RETHERMALIZER.

PROVIDED BY HOOD VENDOR.

THE HOOD. PROVIDED BY STRATOVENT.

AND GC INSTALLED. PROVIDED BY

16"H, UL-LISTED, S/S BAFFLE

FILTERS.

GREASE CUP

HOOD VENDOR.

ETL LISTED UL/ULC-710. ULC-S646: # 3054804-001



EAM Engineers, Inc.

Electrical and Mechanical Consulting Engineers

180 High Oak Road, Bloomfield Hills, MI 48304

Phone 248.528.2670 Fax 248.528.1642

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Job No.: 273-22060

ROCHESTER HILLS, MI 48307 PHONE (248) 524-4700 (248) 524-9746

PROJECT # 22002

	DATE	REMARKS
1	6/23/22	Bids & Permits

CONTRACT DATE: BUILDING TYPE: END. MED 40

PLAN VERSION: MARCH 2021

BRAND DESIGNER SITE NUMBER:

STORE NUMBER

PA/PM:

DRAWN BY. JOB NO.:

> **GREAT LAKES** TACO, LLC

2717 Main Street (M-53) Marlette, Michigan 48453



ENDEAVOR 2.0 HOOD DETAILS AND SECTIONS





System Size: ANSUL-3.0 Gallons Total, R102 Flow Points: 8 Design, 11 (max)

HOOD EXHAUST FAN DETAIL NTS

Hood #1: 6'-3" L x 36" W x 14" H Exhaust Riser Size: 10" x 10"

- FIELD PIPE DROPS AS SHOWN: SLEEVING, ELBOWS TEES, AND NOZZLES SUPPLIED BY STRATOVENT FOR

- MAXIMUM 9 ELBOWS IN SUPPLY LINE, MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE. - ALL NOZZLE HEIGHT AND PLACEMENT TO BE DETERMINED BY INSTALLER AND AHJ PER ANSUL GUIDELINES.

- SYSTEM INSTALLATION AND FINAL HOOKUP SOURCED BY GEN CONTRACTOR. SYSTEM PARTS OPTIONALLY

1W NOZZLE ASSEMBLY (419336)

30 HIGH TEMP FUSIBLE LINK

MGV MECHANICAL GAS VALVE

34 REMOTE MANUAL PULL STATION S SWIVEL ADAPTOR

THIS HOOD DESIGN IS BASED UPON STRATOVENT, MODEL SVND2. MANUFACTURED BY: LISTED ... STRATOVENT VENTILATION HOODS RALEIGH, NC 27616 INTERNATIONAL CONTACT: JEFF JOHNSON, 251-490-6114 HOOD NOTES AND SPECS (TYP.) NTS

HEAT SENSOR ATTACHMENT NTS

HOUGH, STREIN DE TRAINGREUT IN COORDINATE OF THE METERS AND THE ME

5

LOW-PROFILE HOOD

ROOF LINE !

27"H, 3-SIDED DUCT

ENCLOSURE PANELS,

SHIPPED LOOSE BY

FOR UP TO 9FT DROP

CEILING.

MOUNTING CHANNEL. FACTORY

POWER OUTLET FLUSH MOUNTED

ON FACE OF HOOD WITH JBOX ON

30"L X 3"H X 1.25"W, TIMER

FINISHED FLOOR LINE

UPDATED: 6FT-3IN LONG VERSION, 04-11-2020

ATTACHED. DUAL 115V,1PH

HOOD SUPPLIER. DESIGN

HOOD #1

DUCT TERMINATION SHALL

DROP CEILING (TYPICAL)

NOTIFY HOOD

DROP CEILING

IS HIGHER OR

LOWER THAN

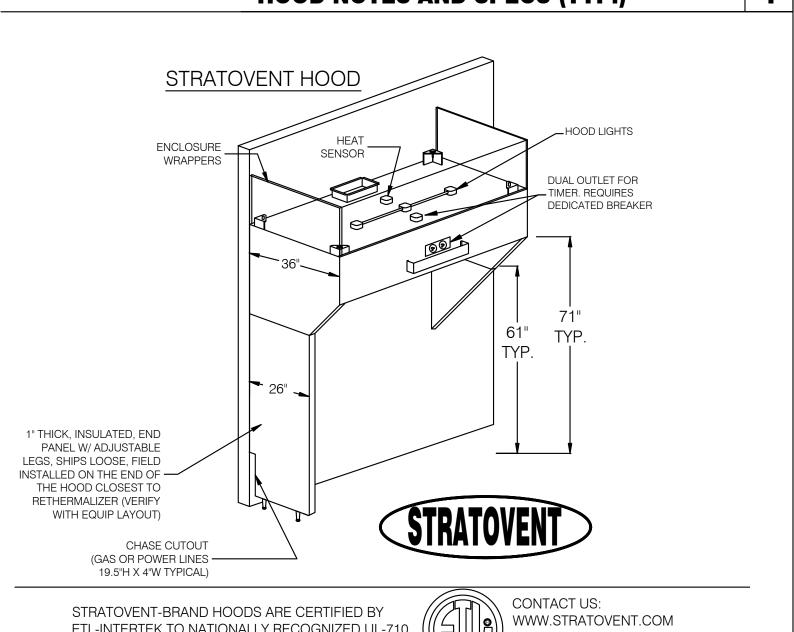
8'-10" AFF.

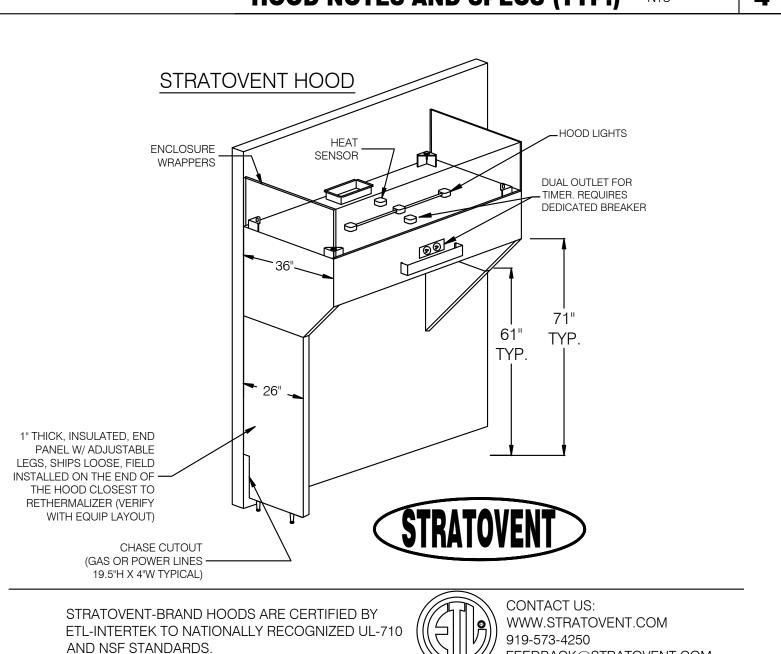
SUPPLIER IF

EXPAND TO MATCH FAN

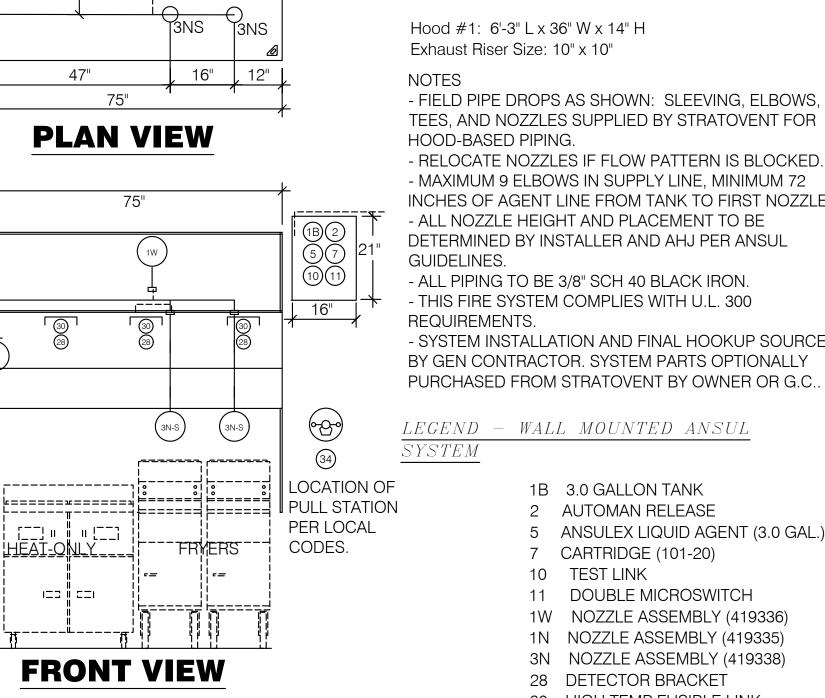
INLET SIZE. DO NOT

OBSTRUCT FAN INLET.





FEEDBACK@STRATOVENT.COM **HOOD ISOMETRIC** 12" = 1'-0"



TACO BELL HOOD FIRE SUPPRESSION SYSTEM PLAN

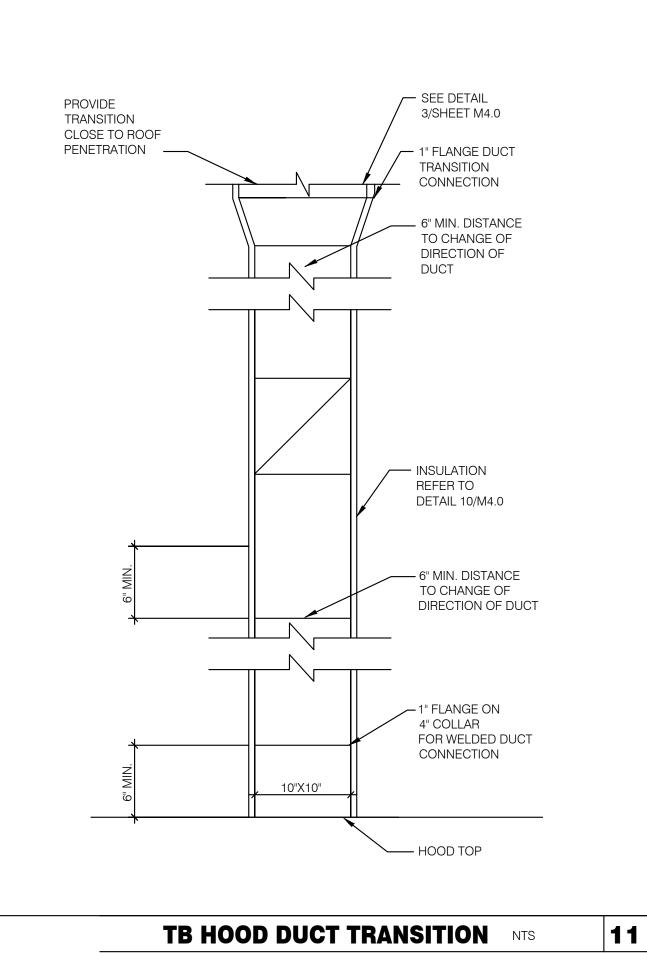
DESIGN NOTE:

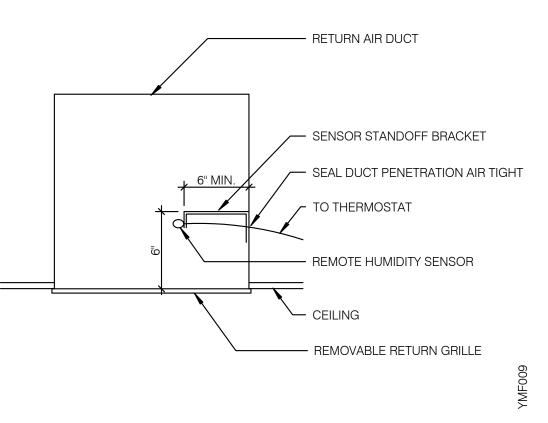
ABOVE DEPICTION SHOWS DUAL FRYERS ON RIGHT END

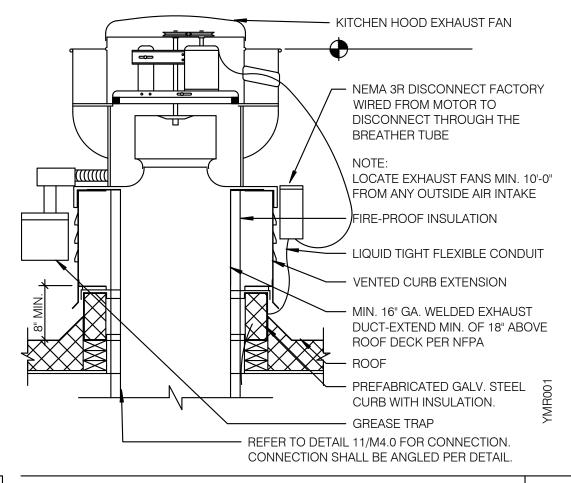
LAYOUT PER PLANS AND PLACE FRYER NOZZLES ON THE

LEFT END WHEN APPROPRIATE TO SUIT SITE CONDITIONS

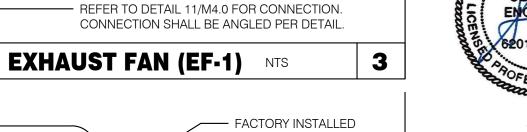
OF THE HOOD. HOOD SUPPLIER WILL VERIFY EQUIP







RESTROOM FAN (EF-2) NTS



CURB

DAMPERS

OPPOSED BLADE

STANDARD CURB CAP, FASTEN PER MFR'S RECOMMENDATIONS

· METAL EXHAUST DUCT

2



EAM Engineers, Inc. DISCONNECT & CONDUIT CHASE, PROVIDE POWER TO DISCONNECT WITHIN

180 High Oak Road, Bloomfield Hills, MI 48304 Phone 248.528.2670 Fax 248.528.1642 $www.eam\text{-engineers.com} \hspace{0.2cm} \blacksquare \hspace{0.2cm} eam@eam\text{-engineers.com}$

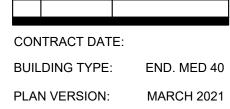
Job No.: 273-22060



441 S. LIVERNOIS ROAD SUITE 265 ROCHESTER HILLS, MI 48307

(248) 524-4700 (248) 524-9746

PROJECT # 22002 DATE REMARKS 1 6/23/22 Bids & Permits



BRAND DESIGNER: SITE NUMBER:

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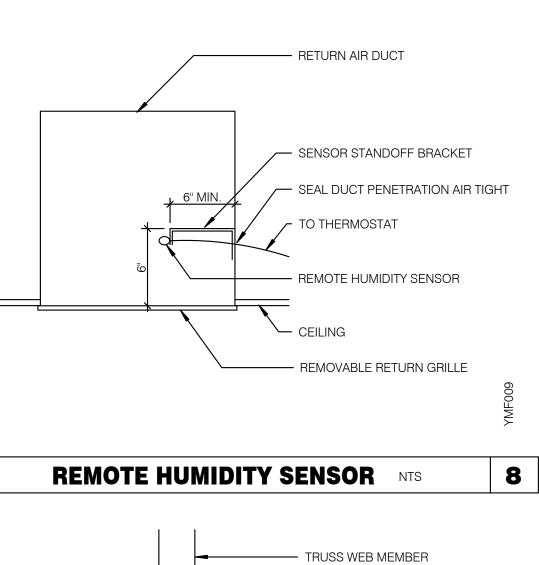


ENDEAVOR 2.0 MECHANICAL DETAILS

- 5/16" DIA. ALL THREAD

ABOVE.

SECURED TO STRUCTURE



- NUT & WASHER TOP & - 4"x4" BLOCK @ ROD (4 LOCATIONS) - H2.5 EACH SIDE - 2"x6" TUSS BTM CORD - 1/2" DIA ALL THREAD ROD DRILL THRU BLOCK C.L.

ALL-THREADS ROD - WASHER & NUT MOUNTING CHANNEL ON HOOD

NOT USED NTS

6

ROD ATTACHMENT NTS

5

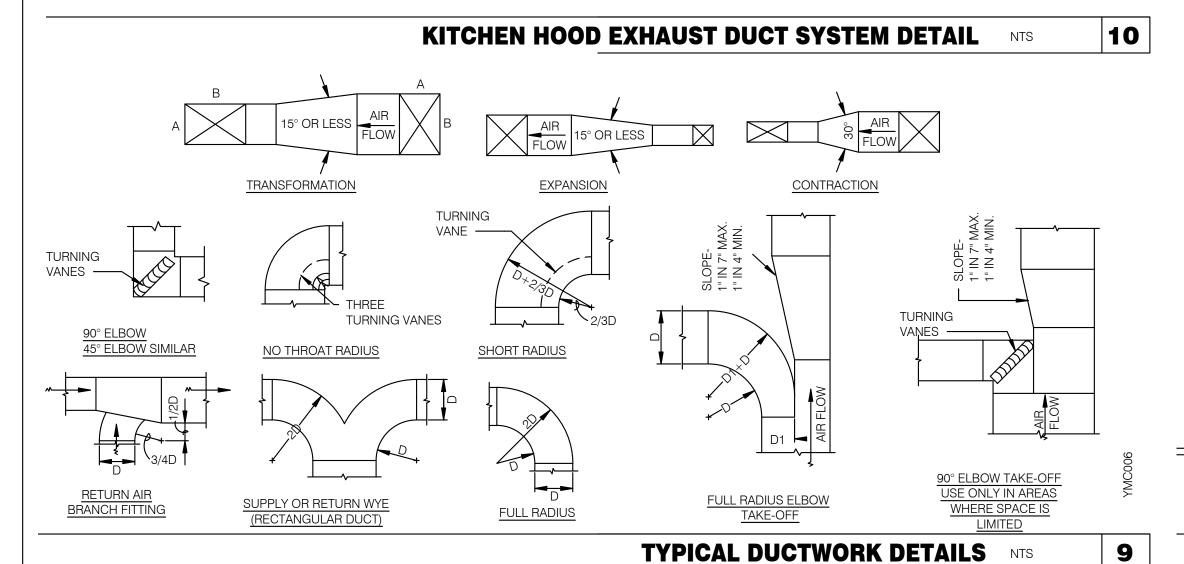
BOLT CONNECTION TO HOOD NTS

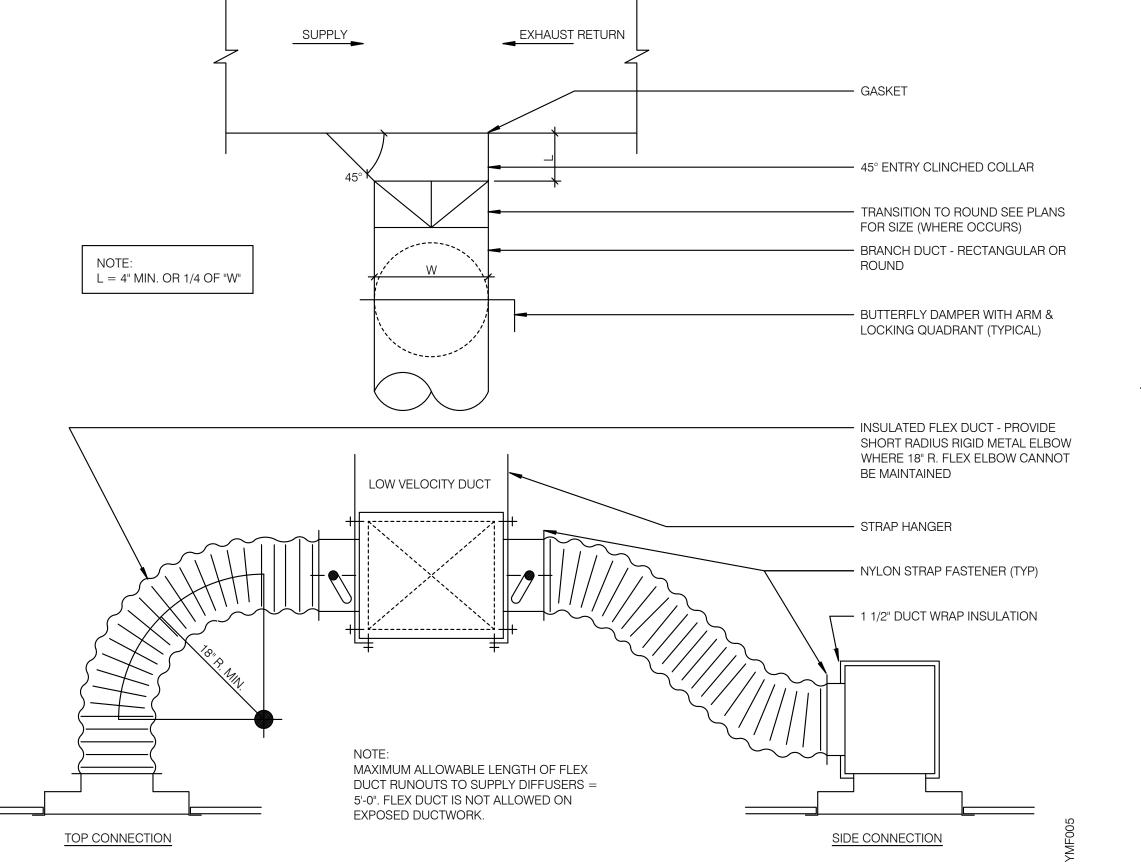
BANDING - 304 SS 3/4"W X .015" THICK MIN. 3" MIN. LONGITUDINAL OVERLAP AT BLANKET JOINT -3" MIN. PERIMETER OVERLAP AT BLANKET JOINT -CONTINUOUSLY WELDED HOOD EXHAUST DUCT —

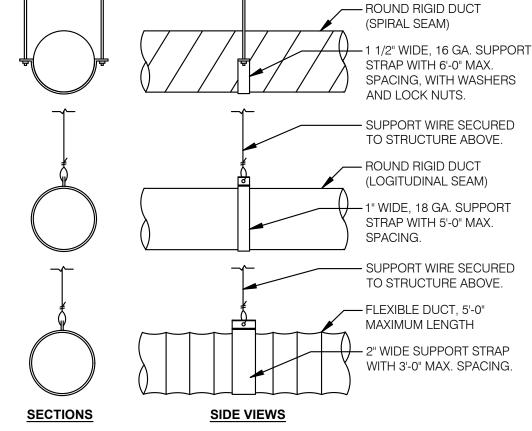
> BANDING REQUIREMENTS: USE 304 STAINLESS STEEL BANDS A MAXIMUM 1-1/2" FROM BLANKET EDGE AND SPACED A MAXIMUM OF 10-1/2" ON CENTER.

TWO LAYER 1-1/2" THICK 8-PCF

- WRAP GREASE DUCT CONTINUOUS AS SHOWN FROM CONNECTION AT FAN THROUGH CURB AND EXTEND 18" MIN. BELOW ROOF DECK.
- FOR HORIZONTAL RUNS OF EXHAUST DUCTS PROVIDE TYPICAL TRAPEZE SUPPORT SYSTEM WITH 1/2" HANGER RODS A MAXIMUM OF 6" FROM INSULATION EDGE. TRAPEZE SUPPORTS SHALL BE SPACED A MAXIMUM OF 60" ON CENTER FROM CENTERLINE OF VERTICAL EXHAUST DUCT.
- SLOPE HORIZONTAL EXHAUST DUCT RUNS A MINIMUM OF 1/4" PER FOOT (2% SLOPE) TOWARDS EXHAUST HOOD.
- PROVIDE INSULATED ACCESS DOOR OR PANEL NEAR MID POINT OF EXHAUST DUCT RUN FOR CLEANING AND INSPECTION OF DUCT. PROVIDE AN APPROVED SIGN ON ACCESS DOOR OR PANEL WHICH READS "ACCESS PANEL DO NOT OBSTRUCT."

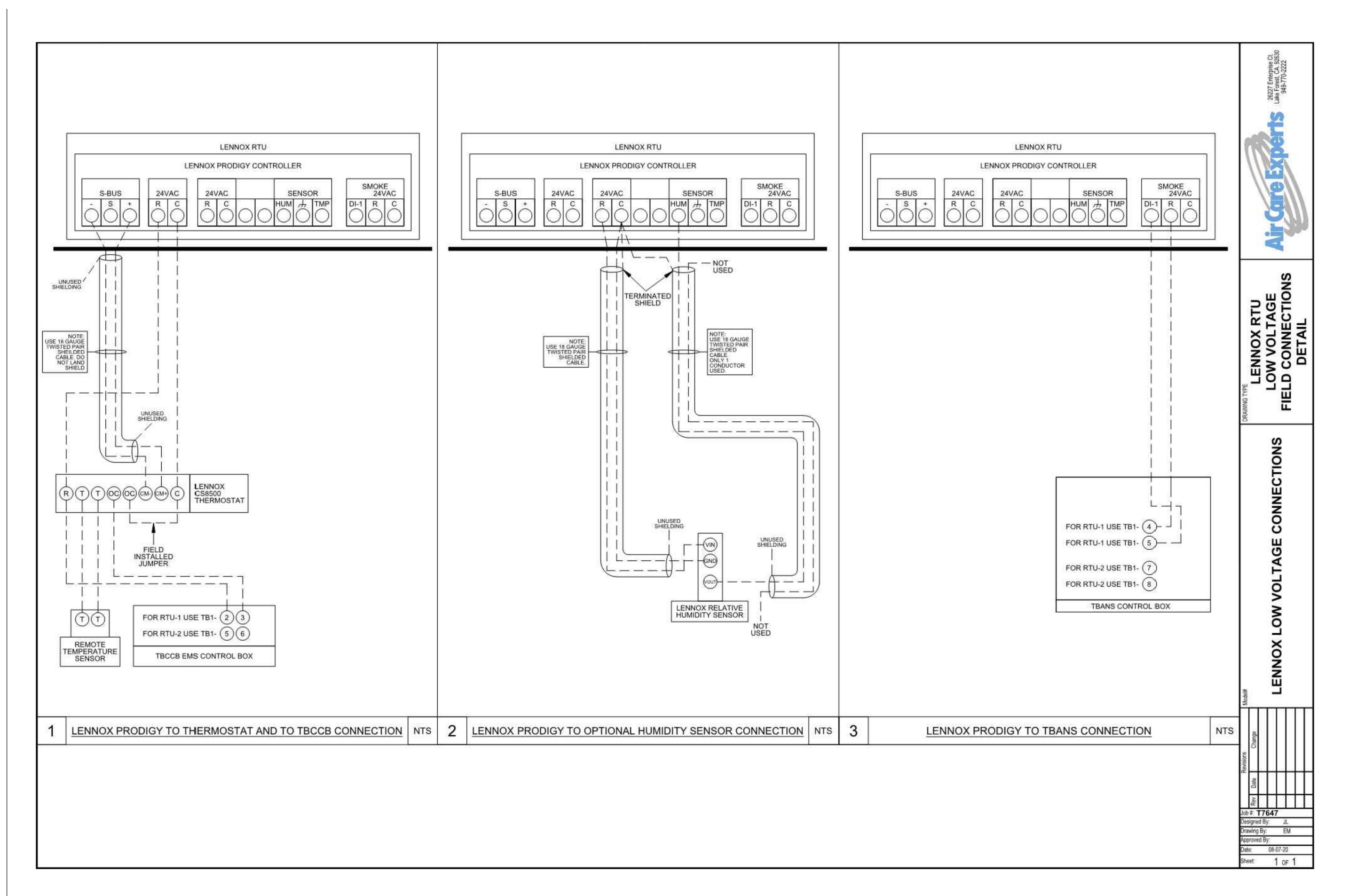






CEILING DIFFUSER CONNECTIONS NTS

DUCT SUPPORT DETAIL NTS





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Inh No + 272 22060



ARCHITECTS INC. A.I.A 441 S. LIVERNOIS ROAD SUITE 265

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(248) 524-4700 (248) 524-9746

PROJECT # 22002

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ENDEAVOR 2.0
CONTROLS
DETAILS

M5.0

PLOT DATE: