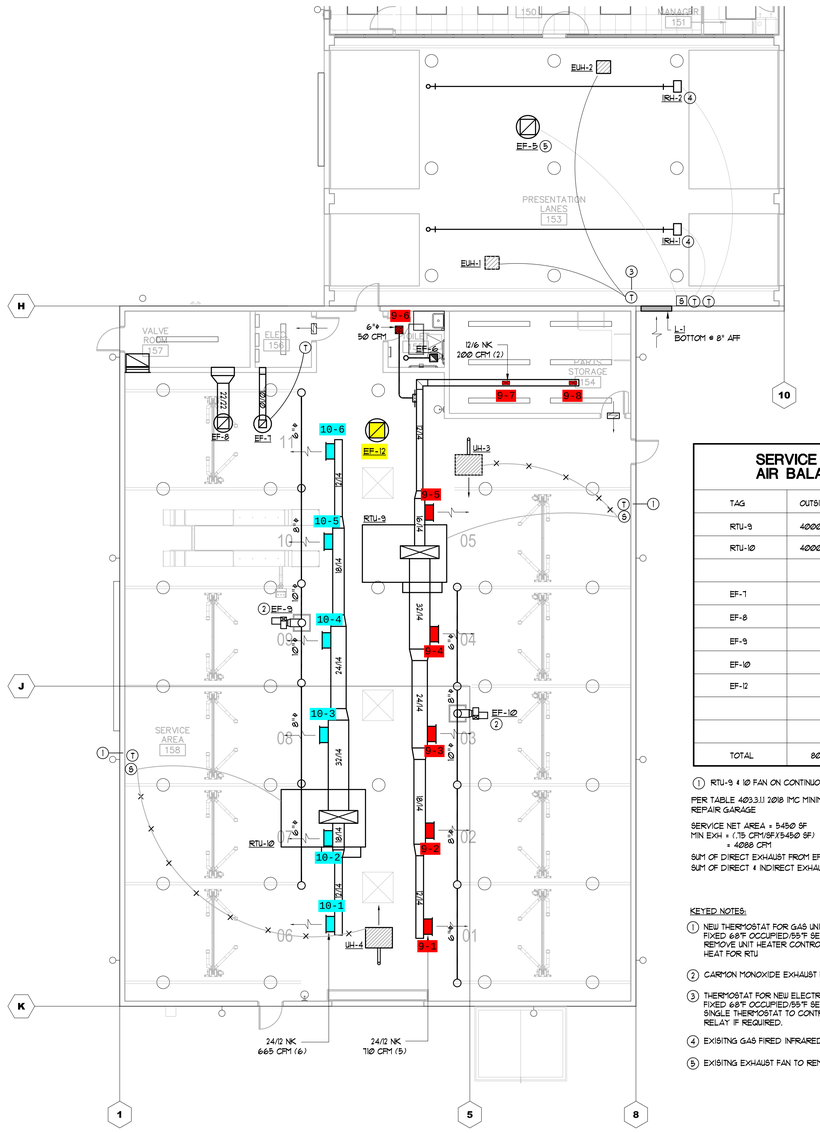


NOTE: SHOWN FOR TEST AND BALANCE PURPOSES ONLY. SEE TEST AND BALANCE SCOPE ON M3.0

N 1 M1.0 PART PLAN – HVAC

SCALE: 1/8" = 1'-0"

SERVICE AREA AIR BALANCE

TAG	OUTSIDE AIR	EXHAUST
RTU-9	4000 (1)	
RTU-10	4000 (1)	
EF-7		300
EF-8		2000
EF-9		1800
EF-10		1500
EF-12		1500
TOTAL	8000	7100

(1) RTU-9 & 10 FAN ON CONTINUOUSLY DURING OCCUPIED

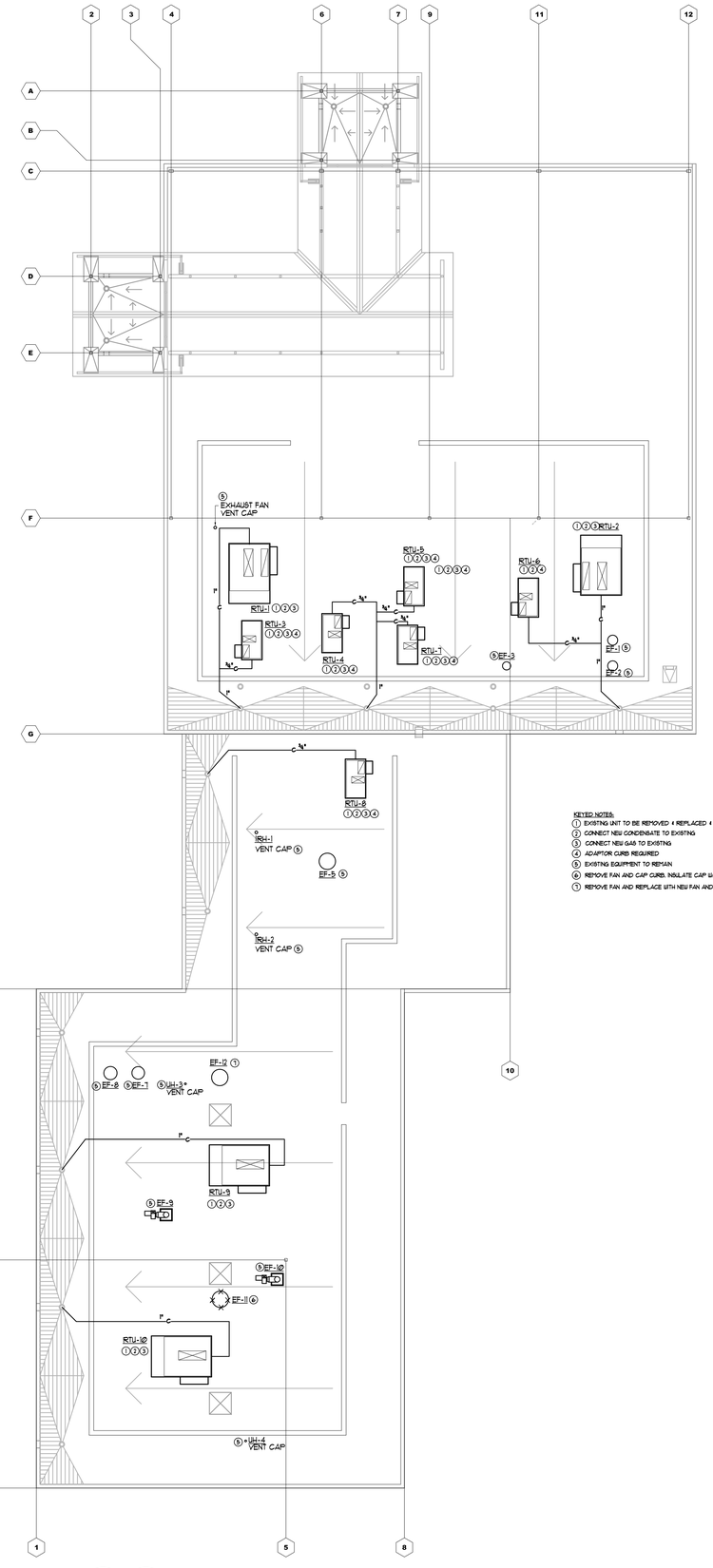
PER TABLE 403.3.1.1 2018 IMC MINIMUM DIRECT EXHAUST .75 CFM/SF REPAIR GARAGE

SERVICE NET AREA = 5450 SF
MIN EXH = (.75 CFM/SF)(5450 SF)
= 4088 CFM

SUM OF DIRECT EXHAUST FROM EF- 9, 10, 12 = 4800 CFM
SUM OF DIRECT & INDIRECT EXHAUST = 7,100 CFM

KEYED NOTES:

1. NEW THERMOSTAT FOR GAS UNIT HEATER LITESTAT TGH2-KRO FIXED 68°F OCCUPIED/55°F SETBACK, NO OTHER IS ACCEPTABLE. REMOVE UNIT HEATER CONTROL FROM EMS AS 3RD STAGE HEAT FOR RTU
2. CARMON MONOXIDE EXHAUST FAN
3. THERMOSTAT FOR NEW ELECTRIC UNIT HEATER LITESTAT TGH2-KRO FIXED 68°F OCCUPIED/55°F SETBACK, NO OTHER IS ACCEPTABLE. SINGLE THERMOSTAT TO CONTROL BOTH HEATERS, FURNISH 2 POLE RELAY IF REQUIRED.
4. EXISITNG GAS FIRED INFRARED TUBE HEATERS TO REMAIN
5. EXISITNG EXHAUST FAN TO REMAIN

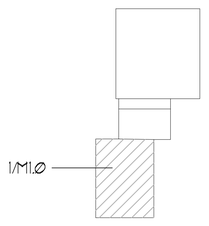


N 1 M1.0 ROOF PLAN – HVAC

SCALE: 3/32" = 1'-0"

KEYED NOTES:

1. EXISTING UNIT TO BE REMOVED & REPLACED 4 EXISTING CURB TO REMAIN
2. CONNECT NEW CONDENSATE TO EXISTING
3. CONNECT NEW GAS TO EXISTING
4. ADAPTOR CURB REQUIRED
5. EXISTING EQUIPMENT TO REMAIN
6. REMOVE FAN AND CAP CURB, INSULATE CAP WITH 2" POLYSTYRENE
7. REMOVE FAN AND REPLACE WITH NEW FAN AND ADAPTER CURB



KEY PLAN

A.M. CERRA, JR. P.E.
1827 POWERS FERRY ROAD
BLDG # 18, SUITE # 100
ATLANTA, GEORGIA 30339
770-980-0581

22210.01

WISCONSIN A.M. CERRA, JR. E-29546 PROFESSIONAL ENGINEER

3/15/22

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APPROVAL

CARMAX PE

REVISIONS

REV. NO	DATE	DESCRIPTION

CARMAX THE AUTO SUPERSTORE

CARMAX, THE AUTO SUPERSTORE, INC.
12800 TUCKAHOE CREEK PKWY RICHMOND, VA 23238
(804) 747-0422

STORE NO. 7179
1011 WEST METRO BOULEVARD
MILWAUKEE, WI 53224

PROJECT NO	22210.01
DATE	4 MAR 2022
SHEET TITLE	PART PLAN & ROOF PLAN – HVAC
SHEET NO	M1.0

HVAC GENERAL NOTES

1. ALL CONTROL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF N.F.P.A. 70. ALL WIRING SHALL BE CONCEALED.
2. CONTRACTOR SHALL INSTALL ALL ROOF CURBS FOR ROOFTOP UNITS LEVEL TO HORIZON AT (4) CORNERS.
3. AIR TEST AND BALANCE REQUIRED BY INDEPENDENT TAB CONTRACTOR AABC OR NEBB CERTIFIED. SEE TEST AND BALANCE SCOPE ON THIS SHEET
4. EXISTING SMOKE DETECTORS TO REMAIN AND BE REUSED.
5. LENNOX START UP TECH SHALL PROGRAM THE PRODIGY BOARDS IN ALL NEW RTU'S. PRODIGY BOARDS SHALL BE PROGRAMMED PRIOR TO CSUSA RECOMMISSIONING THE NOVAR SYSTEM.
6. CONTRACTOR SHALL PROVIDE CLEAN FILTERS IN ROOFTOP UNITS PRIOR TO AIR BALANCE AND AGAIN PRIOR TO OWNER ACCEPTANCE.
7. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2015 INTERNATIONAL MECHANICAL AND FUEL GAS CODES WITH APPLICABLE STATE AMENDMENTS. ALL EQUIPMENT AND MATERIALS CAPABLE OF BEING U.L. LABELLED OR LISTED SHALL BEAR THE U.L. LABEL.
8. CONTRACTOR SHALL PROVIDE A GASKET BETWEEN BASE OF ROOF MOUNTED FANS AND ROOF CURBS TO PROVIDE AN AIRTIGHT JOINT.
9. PROVIDE MISCELLANEOUS STEEL AND/OR WOOD BLOCKING AND SUPPORT AT ROOF CURBS AND OPENINGS AS REQUIRED TO SUPPORT ROOF AND EQUIPMENT. SPECIFIC REQUIREMENTS SHALL BE VERIFIED WITH STRUCTURAL ENGINEER AND APPROVED EQUIPMENT DRAWINGS PRIOR TO PLACEMENT.
10. NEW SUPPLY AND EXHAUST DUCT SHALL BE 2.0 IN PRESSURE CLASS.
11. NEW DUCT SHALL HAVE PAINT GRIP FINISH AND BE EITHER GALVANNEALED OR MILL PHOSPHATIZED.
12. ANY NEW SUPPLY DUCT SHALL BE INTERNALLY INSULATED WITH 1" DUCT LINER EQUAL TO OWENS CORNING ACOUSTITEX, 1.5 LB DENSITY, R=3.8.

PIPING GENERAL NOTES

1. ANY NEW GAS PIPING SHALL BE ASTM A-120, SCHEDULE 40, BLACK STEEL WITH 150 LB. MALLEABLE IRON SCREWED FITTINGS.
2. ANY NEW EXTERIOR GAS PIPE SHALL BE PAINTED WITH RUST PROHIBITIVE PAINT.

HVAC LEGEND

A.F.F.	ABOVE FINISHED FLOOR
VD	VOLUME DAMPER
B.O.S.	BOTTOM OF STEEL
B.O.D.	BOTTOM OF DUCT
U.N.O.	UNLESS NOTED OTHERWISE
VD	VOLUME DAMPER
	SUPPLY GRILLE WITH FLEX DUCT DROP
	RETURN/EXHAUST GRILLE
R, D	R = RISE, D = DROP
T	THERMOSTAT
S	LENNOX ROOM TEMPERATURE/HUMIDITY SENSOR 72" AFF
	SPIN-IN FITTING
	EXISTING DUCT
	EXISTING DUCT TO BE REMOVED
OG	ORIGINAL GAS
AG	ADDITION GAS
EG	ESTIMATED EXISTING GAS
G	NEW GAS

ROOFTOP UNIT NOTES

1. CARMAX AUTO SUPERSTORE, LLC HAS A NATIONAL ACCOUNT WITH LENNOX INDUSTRIES, INC., FOR PRICING AND DELIVERY OF PACKAGED ROOFTOP UNITS IN ACCORDANCE WITH THE FOLLOWING. NO SUBSTITUTIONS WILL BE ALLOWED.

   A. ROOFTOP UNITS SHALL BE AS SCHEDULED.

   THE ELECTRICAL PACKAGE SHALL INCLUDE:
   -UNIT DISCONNECT (INSTALLED AND WIRED)
   -BOTTOM GAS/POWER ENTRY
   -STANDARD LOW AMBIENT CONTROL
   -DUAL 120V GFCI TYPE OUTLETS (TO BE FIELD WIRED)
   -GLOBAL DRY BULB ECONOMIZERS W/FAN POWERED EXHAUST (1.5T AND LARGER UNLESS OTHERWISE NOTED)
   -GLOBAL DRY BULB ECONOMIZERS W/BAROMETRIC RELIEF (6T AND SMALLER)
   -STAINLESS STEEL HEAT EXCHANGER AND FRESH AIR TEMPERING FOR RTU-8+9
2. THE LENNOX NATIONAL ACCOUNT CONTACT IS:

   RON JOHNSON
   764-621-7606
3. HVAC EQUIPMENT PERFORMANCE CHECK (EPC)

   UPON COMPLETION OF THE HVAC INSTALLATION AND STARTUP, THE OWNER'S SERVICE CONSULTANT, AT THE OWNER'S EXPENSE, IS TO INSPECT THE JOB AND PERFORM AN (EPC). THIS EPC WILL AID THE CONTRACTOR IN CHECKING EACH MACHINE FOR PROPER OPERATION, CHECKING THE CONTROL PANEL AND ADJUSTING CONTROLS AS NECESSARY.

   THE OWNER'S SERVICE CONSULTANT:

   COMFORT SYSTEMS
   ATTN: VALERIE BEDEL
   PH. 317-246-5181
   valeriebedel@comfortsystemsusa.com

   ALL PROBLEMS DISCOVERED WITH THE EQUIPMENT OR ITS INSTALLATION (EXCLUDING NOVAR INSTALLATION) SHALL BE CORRECTED BY THE HVAC SUBCONTRACTOR IN ACCORDANCE WITH THE OWNER'S SERVICE CONSULTANT.

   AFTER ALL PROBLEMS HAVE BEEN CORRECTED, CARMAX AUTO SUPERSTORE, LLC SHALL VERIFY ALL EQUIPMENT IS OPERATING PROPERLY THROUGH THE NOVAR CONTROLLERS.

   PRIOR TO PERFORMANCE OF THE EPC, THE CONTRACTOR SHALL HAVE SET AND CONNECTED ALL COMPONENTS, COMPLETED THE POWER WIRING, CONNECTED ALL PIPING, REMOVED ALL SHIPPING BLOCKS, COMPLETED THE STARTUP OF ALL UNITS AND FURNISHED THE PRE-EPC CHECKLIST TO THE OWNER'S SERVICE CONSULTANT.

   THE EPC INCLUDES A FULL WRITTEN REPORT. COPIES WILL BE SENT TO THE GENERAL CONTRACTOR, AND CARMAX AUTO SUPERSTORE, LLC. COPIES OF THE EPC SHALL BE INCORPORATED IN TO THE O & M MANUALS BY THE GENERAL CONTRACTOR.

   A. RTU AIR FILTERS SHALL BE CAMFIL FARR AEROPLEAT III PLEATED, 2" THICK MERV 13, OR EQUAL. MARK FILTERS WITH INSTALLATION DATE

   B. THE PACKAGE COMPONENTS WILL BE CLEARLY LABELLED (IN LEGIBLE FORM) ON THE EXTERIOR OF ALL BOXES OR CRATES.

   C. SUBMIT RTU SUBMITTALS IN PDF FORMAT TO THE ENGINEER FOR APPROVAL.

CONTROLS SCOPE OF WORK:

EXISTING RTU'S ARE ON LOGIC ONE BUS6. SAVVY COMMUNICATIONS TO 1CM ALL RTUS WITH ETM 20515 I/O IS BY THE INTEGRATED 1CM IN THE SAVVY.

1. ALL NEW RTU'S WILL BE BACNET.
2. THE GENERAL CONTRACTOR SHALL RETAIN COMFORT SYSTEMS USA (CSUSA) TO FURNISH AND INSTALL CONTROLS AS INDICATED BELOW. THE CONTACT AT CSUSA IS:
   VALERIE BEDEL 317-246-5181
3. PROVIDE PRE-CONSTRUCTION SCREEN SHOTS FROM NOVAR EMS MONITORING TO INCLUDE UNIT STATUS, MODULE COMMUNICATIONS STATUS AND ACTIVE ALARMS.
4. NOT USED
5. CONNECT NEW RTU'S W/PRODIGY BOARDS TO BACNET COMMUNICATION.
6. FOR NEW RTU'S REPLACE RTU NOVAR TEMPERATURE SENSORS WITH LENNOX SENSORS.
7. REPLACE/UPGRADE SAVVY 31 WITH OPUS XCM105 PANEL. SAME BASE PLATE, MINIMAL RE-WIRING REQUIRED.
8. CONNECT BACNET NETWORK AS REQUIRED.
9. TURN OVER SAVVY 31 PANEL AND ETM'S TO CARMAX FOR FUTURE SERVICE CALL INVENTORY SHIP TO COMFORT SYSTEMS USA, ATTN VALERIE BEDEL, CARMAX EMS ACCOUNT CO-ORDINATOR.
10. UPDATE SOFTWARE PER NEW CARMAX TEMPLATE
11. COMMISSION EMS SYSTEM
12. PROVIDE POST CONSTRUCTION SCREEN SHOTS FROM NOVAR EMS MONITORING TO INCLUDE UNIT STATUS, MODULE COMMUNICATIONS STATUS AND ACTIVE ALARMS.
13. LENNOX/CARMAX RTU SET UP SHEET IS TO BE COMPLETED UPON UNIT STARTUP. A COMPLETED SHEET IS TO BE LEFT IN EACH NEW RTU AND A COPY SUBMITTED WITH CLOSE OUT DOCUMENTATION FOR EACH NEW RTU.
14. FURNISH AND INSTALL ADDITIONAL CONTROL WIRE FOR CO2 SENSORS AND UNITS WITH HUMIDITROL.
15. ALL CONTROL, COMMUNICATIONS BUS AND SENSOR WIRING, NEW AND EXISTING, IS PART OF THE CONTROLS CONTRACTOR SCOPE OF WORK. REPLACE ANY DAMAGED WIRE.

TEST & BALANCE SCOPE

MARK	TOTAL AIR ACROSS COIL	OUTSIDE AIR	BYPASS AIR	SUPPLY AIR TO REGISTERS	OTHER
RTU-1 THRU 8	AS SCHEDULED	AS SCHEDULED	--	--	
RTU-9 & 10	5600	4000	1600	4000	REGISTER AIR QTY AS SHOWN ON 1M1.0
EF-12	--	--	--	--	1500 CFM EXHAUST AS SCHEDULED

SUGGESTED TEST & BALANCE PROCEDURE FOR BYPASS UNITS:

RTU- 9 & 10

1. CLOSE BYPASS DAMPER & MAKE AIR QTY 5600 CFM.
2. GRADUALLY OPEN BYPASS DAMPER UNTIL OUTSIDE AIR IS 4000 CFM. THIS MEANS 1600 CFM IS BEING BYPASSED IN THE CURB
3. OUTSIDE AIR SHOULD EQUAL SUPPLY AIR TO THE REGISTERS
4. TEST AND BALANCE CONTRACTOR TO NOTIFY COMFORT SYSTEMS AND INCLUDE IN TAB REPORT REGARDING MINIMUM POSITION OF OUTSIDE AIR DAMPER. SEE RTU NOTES FOR CONTACT INFO.

ROOFTOP UNIT SCHEDULE

(SHOWN FOR REFERENCE ONLY.)

MARK	ZONE	EER	VOLT/PH	FAN DATA CFM	FAN DATA TSP IN WC	FAN DATA ESP IN WC	FAN DATA HP	(4) COOLING DATA EAT DB/WB	COOLING DATA TOTAL MBH	COOLING DATA SENSIBLE MBH	GAS DATA INPUT MBH	GAS DATA OUTPUT MBH	MIN. O/A CFM	MODEL	WEIGHT (3)	(1) REMARKS
RTU-1	SHOWROOM	11.8	480/3	5750	.9	.8	3.0	76.7/64.3	179.9	132.2	260	208		LENNOX LGC180H	2900	
RTU-2	SHOWROOM	11.8	480/3	5750	.9	.8	3.0	76.7/64.3	179.9	132.2	260	208		LENNOX LGC180H	2900	
RTU-3	CUSTOMER WAITING	11.3	480/3	1051	.62	.6	1.5	80.1/65.9	36.3	26.8	78	62.4		LENNOX LGA036H	900	
RTU-4	BUSINESS	11.2	480/3	1800	.72	.6	1.5	79.2/65.3	61.5	46.9	78	62.4		LENNOX LGA066H	900	
RTU-5	BUYERS	11.2	480/3	1200	.63	.6	1.5	79.5/65.9	37	28	78	62.4		LENNOX LGA036H	900	
RTU-6	DATA/PBX	11.2	480/3	960	.63	.6	1.5	76/67	34.3	28	-	-		LENNOX LCA036H	900	
RTU-7	BREAK/CONF	11.3	480/3	1500	.69	.6	1.5	78/65.9	48.8	34.3	78	62.4		LENNOX LGA048H	900	
RTU-8	SERVICE WRITER	11.2	480/3	1100	.62	.6	1.5	77.2/64.9	36	25.6	78	62.4		LENNOX LGA036H	900	
RTU-9	SERVICE AREA	11.0	480/3	5600	1.04	.8	5.0	84/71.7	265	153.8	410	376		LENNOX LGA240H	4900	(2)
RTU-10	SERVICE AREA	11.0	480/3	5600	1.04	.8	5.0	84/71.7	265	153.8	410	376		LENNOX LGA240H	4900	(2)

(1) PROVIDE WITH FACTORY INSTALLED NOVAR CONTROL MODULE: LGA UNIT SERIES (MODEL 2051)
(2) RTU-9 & 10, BYPASS 850 CFM, 4750 CFM TO SERVICE
(3) INCLUDES WEIGH OF UNIT AND CURB
(4) 95°F CONDENSER AIR

ROOFTOP UNIT SCHEDULE

MARK	ZONE	EER (SEER)	VOLT/PH	FAN DATA CFM	FAN DATA TOT IN WC	FAN DATA ESP IN WC	FAN DATA HP	(9) COOLING DATA EAT DB/WB	COOLING DATA TOTAL MBH	COOLING DATA SENSIBLE MBH	GAS DATA INPUT MBH	GAS DATA OUTPUT MBH	MIN. O/A CFM	MODEL (1)	WEIGHT (11)	REMARKS (2)(4)(12)
RTU-1	SHOWROOM	12.0	480/3	5750	1.1	.8	5.0	80/67	--	--	260	208	650	LENNOX LGH180H4M	2600	(13)(14)
RTU-2	SHOWROOM	12.0	480/3	5750	1.1	.8	5.0	80/67	--	--	260	208	650	LENNOX LGH180H4M	2600	(13)(14)
RTU-3	CUSTOMER WAITING	(11.0)	480/3	1250	.80	.6	1.50	80/67	--	--	65	52	120	LENNOX LGH036H4E	1000	(6)(11)
RTU-4	BUSINESS	(11.0)	480/3	1800	.80	.6	1.0	80/67	--	--	65	52	200	LENNOX LGH060H4E	1100	(6)(11)
RTU-5	BUYERS	(11.0)	480/3	1200	1.1	.6	1.50	80/67	--	--	65	52	160	LENNOX LGH036H4E	1000	(6)(11)
RTU-6	PBX	(11.0)	480/3	975	1.0	.8	1.50	75/63	--	--	--	--	-	LENNOX LCH036H4M	900	(11)
RTU-7	BREAK ROOM	(11.0)	480/3	1500	1.2	.6	.75	80/67	--	--	65	52	300	LENNOX LGH048H4E	1000	(6)(11)
RTU-8	SERVICE WRITER	(11.0)	480/3	1100	.80	.6	1.50	80/67	--	--	65	52	160	LENNOX LGH036H4E	1000	(6)(11)
RTU-9	SERVICE AREA (BP)	12.0	480/3	5600	1.20	.8	5.0	80/70	243	139	480	384	4000	LENNOX LGH240H4B	3800	(3)(7)(8)(10)(14)(15)(16)(5)
RTU-10	SERVICE AREA (BP)	12.0	480/3	5600	1.20	.8	5.0	80/70	243	139	480	384	4000	LENNOX LGH240H4B	3800	(3)(7)(8)(10)(14)(15)(16)(5)

(1) ONLY ACCEPTABLE MANUFACTURER IS LENNOX. SEE "ROOFTOP UNIT NOTES"
(2) FIELD ADJUST SUPPLY FAN R.P.M. TO PROVIDE AIR QUANTITIES AS SCHEDULED ABOVE. INSTALL FIELD-SUPPLIED MOTOR AND/OR DRIVE AS REQ'D
(3) INSTALL FLAT DISCHARGE AIR TEMPERATURE SENSOR. SHIPPED LOOSE IN RTU CABINET. INSTALL SENSOR IN SUPPLY IN SUPPLY DUCT APPROX 3FT BELOW ROOF DECK. SEE DETAIL 4/M4.0
(4) BACNET CONTROL, NEW TEMP SENSOR OR COMBO TEMP/HUMIDITY SENSOR
(5) LEAVING AIR TEMPERATURE 51.5°F DB
(6) GLOBAL ECONOMIZER WITH BAROMETRIC RELIEF
(7) STAINLESS STEEL HEAT EXCHANGER
(8) FRESH AIR TEMPERING, 100% OUTSIDE AIR
(9) 95°F CONDENSER AIR
(10) MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONNECTION OF WIRING HARNESS SHIPPED LOOSE W/ RTU THAT ARE ASSOCIATED WITH OUTSIDE AIR DAMPER.
(11) ADAPTER CURB
(12) DRAIN PAN OVERFLOW SWITCH MODEL 216SRS20A1
(13) GLOBAL ECONOMIZER WITH POWERED EXHAUST
(14) 2 STAGE HEAT
(15) REUSE EXISTING BY-PASS CURB, NEW MIXING BOX
(16) 5600 CFM ACROSS COIL, 1600 CFM BYPASSED IN CURB, 4000 CFM OUTSIDE AIR AND SUPPLY TO SERVICE
(17) INCLUDES WEIGHT OF EXISTING CURB AND ADAPTER CURB WHERE APPPLICABLE

ELECTRIC HEATER SCHEDULE

MARK	LOCATIONS AND AREAS SERVED	CFM	KW	VOLT/PH	FAN TYPE	MANUFACTURER/MODEL	MOUNTED	REMARKS
EUH-1	PRESENTATION	950	15	480/3	DOWNFLOW UNIT HEATER	QMARK MUH-154	(1)	(2)(3)(4)(5)
EUH-2	PRESENTATION	950	15	480/3	DOWNFLOW UNIT HEATER	QMARK MUH-154	(1)	(2)(3)(4)(5)

(1) PROVIDE WITH VERTICAL DOWN DISCHARGE MOUNTING BRACKET FOR SUSPENSION FROM STRUCTURE FACE OF HEATER SHALL BE EVEN WITH BOTTOM OF BAR JOISTS.
(2) PROVIDE LITESTAT TGH2-KRO HEAT ONLY, 24V PROGRAMMABLE, NON-ADJUSTABLE. ONE THERMOSTAT T CONTROL BOTH HEATERS. FURNISH 2 POLE RELAY IF REQUIRED NO OTHER THERMOSTAT IS ACCEPTABLE.
(3) PROVIDE WITH DISCONNECT SWITCH
(4) HALF BLADES VERTICAL DOWN DISCHARGE HALF AT 45° DEGREE ACROSS THE ROOM
(5) FACTORY WIRED FOR LOW VOLTAGE CONTROL

FAN SCHEDULE

MARK	LOCATIONS AND AREAS SERVED	CFM	ESP IN. WC	MAX FAN RPM	FAN TYPE	DAMPER	VOLT/PH	HP (WATTS)	MANUFACTURER / MODEL	SC	REMARKS
EF-12	SERVICE	1500	.375	1725	ROOF CENT	BACKDRAFT	120/1	1/2	GREENHECK CUE-121-A	SC	(1)(2)(3)(4)(5)(6)

(1) ROOF CURB CAP SHALL NOT OVERLAP CURB MORE THEN 1/2" ON ALL SIDES. ATTACH CURB CAP TO CURB ON ALL SIDES. MIN. 2 SCREWS PER SIDE.
(2) PROVIDE ADAPTER CURB, GASKET BETWEEN CURB AND FAN
(3) PROVIDE WITH DISCONNECTS
(4) PROVIDE FANS MARKED "SC" ABOVE WITH SOLID STATE SPEED CONTROLLERS
(5) PREVIOUS FAN MOTOR 3/4 HP @ 120V
(6) FAN TO BE CONTROLLED FROM EMS, ON OCCUPIED/OFF SETBACK

A.M. CERRA, JR. P.E.
1827 POWERS FERRY ROAD
BLDG # 18, SUITE # 100
ATLANTA, GEORGIA 30339
770-980-0581

22210.01

WISCONSIN A.M. CERRA, JR. E-25346 PROFESSIONAL ENGINEER
3/15/22

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RELEASED FOR CONSTRUCTION

APPROVAL

CARMAX PE

REVISIONS

REV. NO	DATE	DESCRIPTION

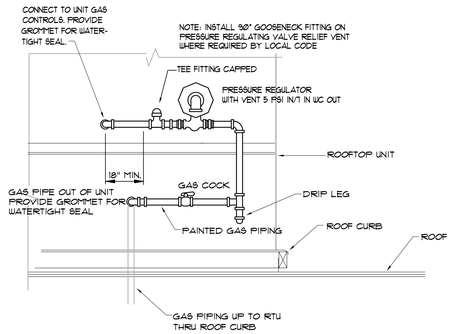
CARMAX
THE AUTO SUPERSTORE
CARMAX, THE AUTO SUPERSTORE, INC.
12800 TUCKAHOE CREEK PKWY RICHMOND, VA 23238
(804) 747-0422

STORE NO. 7179
11011 WEST METRO BOULEVARD
MILWAUKEE, WI 53224

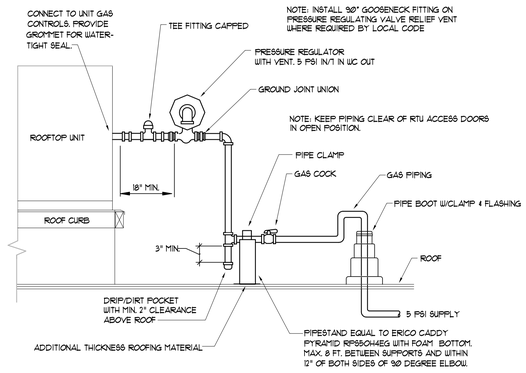
PROJECT NO 22210.01
DATE 4 MAR 2022
SHEET TITLE SCHEDULES – HVAC
SHEET NO M3.0

A.M. CERRA, JR. P.E.
1827 POWERS FERRY ROAD
BLDG # 18, SUITE # 100
ATLANTA, GEORGIA 30339
770-980-0581

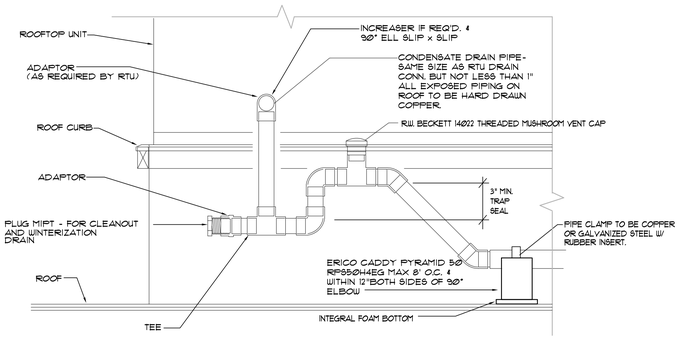
22210.01



3 M4.0 RTU GAS CONNECTION DETAIL
NOT TO SCALE

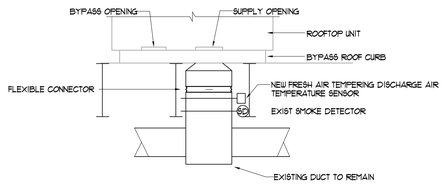


1 M4.0 RTU GAS CONNECTION DETAIL
NOT TO SCALE



NOTE: KEEP PIPE CLEAR OF ACCESS PANELS.

2 M4.0 RTU CONDENSATE DRAIN DETAIL
NOT TO SCALE



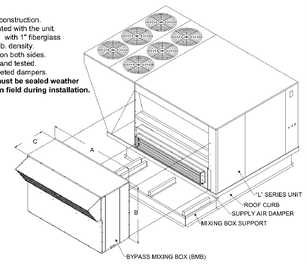
RTU-9 & 10

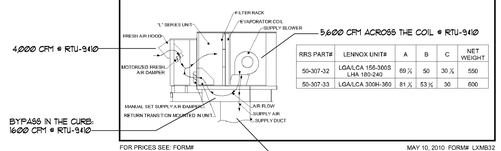
4 M4.0 RTU DUCT DROP DETAIL
NOT TO SCALE

RUSKIN ROOFTOP SYSTEMS — SPECIFICATION DATA FOR LENNOX LGA / LCA 156 - 360 LHA 180-240

RRS MODEL#: 50-307-3* BYPASS MIXING BOX

Features
1. Heavy gauge construction.
2. Color coordinated with the unit.
3. Fully insulated with 1" fiberglass insulation 1.5 lb. density.
4. Access doors on both sides.
5. Factory wired and tested.
6. Low leak gasketed dampers.
7. **Mixing Box must be sealed weather tight to RTU in field during installation.**





RRS PART#	LENNOX UNIT#	A	B	C	NET WEIGHT
50-307-32	LGA/LCA 156-360S LHA 180-240	69 ½	50	30 ½	550
50-307-33	LGA/LCA 300H-360	81 ½	53 ½	30	600

FOR PRICES SEE: FORM# — MAY 10, 2010 FORM# LXMB32 SUPERCEDES 05-02-06

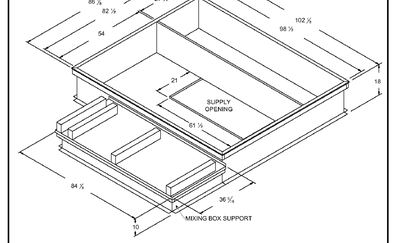
RUSKIN ROOFTOP SYSTEMS
1625 Diplomat Drive, Carrollton, Texas 75006-6848 Phone (972) 247-7447 (800) 552-4822 Fax (972) 243-0940

6 M4.0 MIXING BOX DETAIL
NOT TO SCALE

RSI ROOFTOP SYSTEMS, INC. — SPECIFICATION DATA FOR CARMAX LGA / LCA 156 - 360 LHA 180-240

RSI MODEL: 50-275-32
ROOF CURB
W/ BYPASS MIXING BOX SUPPORT

Features:
1. Roof curb is built to NRCA standards.
2. Roof curb is constructed of 16 gauge G90 steel.
3. Curb and mixing box support ships completely welded in one piece.
4. Full perimeter 2 x 4 wood nailer.
5. Supply plenum completely insulated and assembled.
6. Net weight of curb is 650 lbs.



NOTE: BYPASS CURBS ARE EXISTING TO REMAIN.
SHOWN FOR GENERAL INFORMATION ONLY

FOR PRICES SEE: FORM# LX-CM-LP01 — SEPTEMBER 27, 2006 FORM# LXCMHORSB32 SUPERCEDES 12-04-02

RSI ROOFTOP SYSTEMS, INC. 2405 McIver Lane, Carrollton, Texas 75006-5510 Phone (972) 247-7447 (800) 552-4822 Fax (972) 243-0940

5 M4.0 BYPASS CURB DETAIL
NOT TO SCALE

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WISCONSIN — A.M. CERRA JR. E-23540 — PROFESSIONAL ENGINEER
3/15/22

RELEASED FOR CONSTRUCTION

APPROVAL

CARMAX PE

REVISIONS

REV. NO	DATE	DESCRIPTION

CARMAX — THE AUTO SUPERSTORE

CARMAX, THE AUTO SUPERSTORE, INC.
12800 TUCKER GREEN PKWY RICHMOND, VA 23238
(804) 747-0422

STORE NO. 7179
1101 WEST METRO BOULEVARD
MILWAUKEE, WI 53224

PROJECT NO 22210 .01
DATE 4 MAR 2022
SHEET TITLE

DETAILS – HVAC

SHEET NO M4.0