

HVAC Post-Install Survey

Warning

Site Info	Please don't proceed before you double check that you are at the proper site. You can find the site details below.
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Job Site Information

Survey Source	HVAC_Post-Install_Survey_v17
Job Site Address City, State	1589 W Broad St,Columbus,OH,43222
Business name/Franchise	McDonald's
Job Site #	10512
Site ID	IJ-35017-83000-07523-7218
WO #	70822
Date of HVAC Survey	12-20-2024
Technician/Contractor Name	ZY_CONTRACTOR_NAME
Location Check	I hereby confirm that the info above belongs to the site I'm currently in. (If not DO NOT PROCEED and navigate to the proper Work Order email and access the survey from there) Thank You

Post Install Unit Detail

How many units have been replaced at this jobsite?	2
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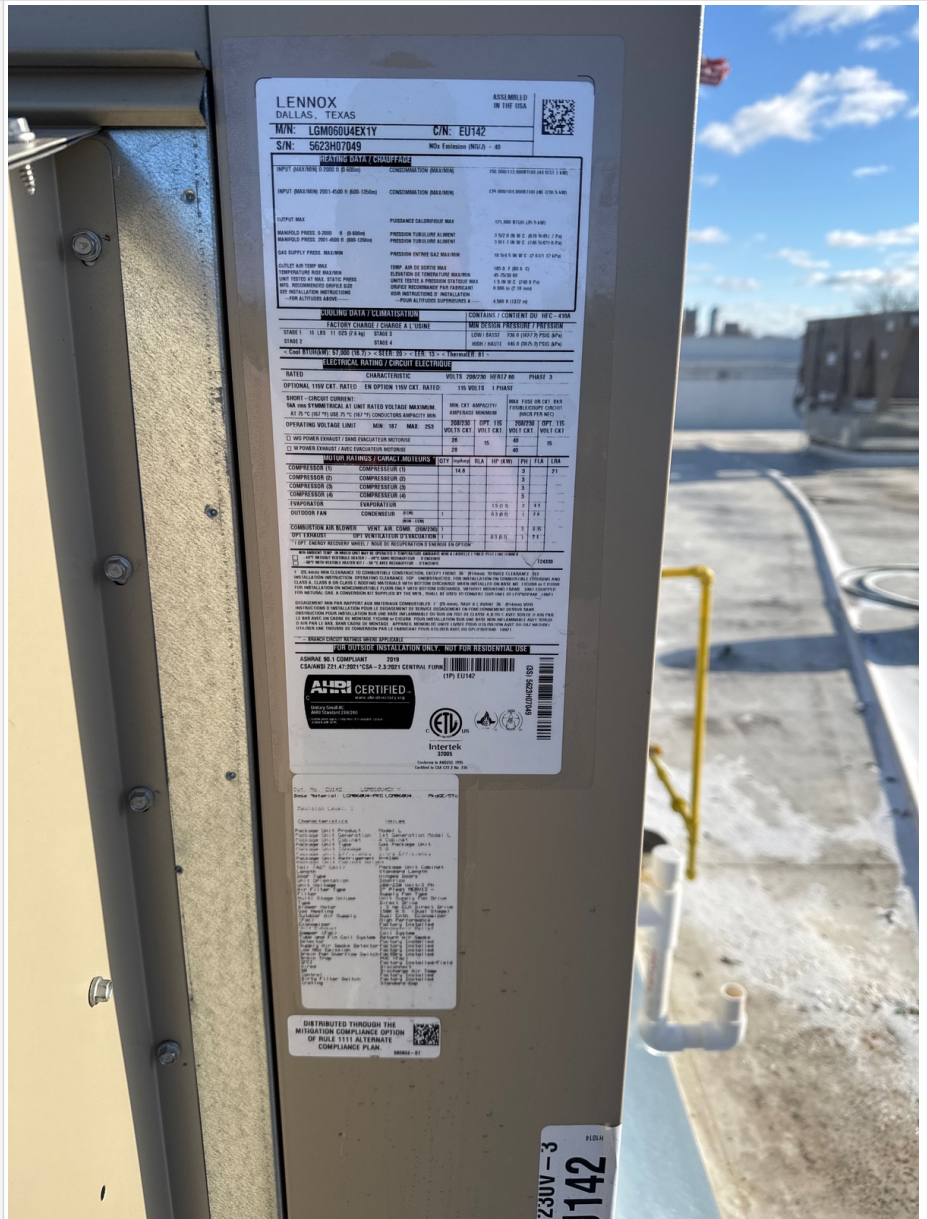
Post-Install Unit Overview #1

Post Install HVAC Unit Details

equipment_type	HVAC
Type of unit?	Packaged Unit
Unit Location	North
Area Served	Kitchen
Manufacturer	LENNOX
Model #	LGM060U4EX1Y
Serial #	5623H07049
Enter the tonnage of the unit	5.00

HVAC Post-Install Survey

Please take a picture of the replaced unit's nameplate



	39.956570, -83.042512 12-21-2024 10:17 AM
Replaced Unit Manufacturer	LENNOX
Replaced Unit Model	LGM060U4EX1Y
Replaced Unit Serial Number	5623H07049
Replaced Unit Tonnage	5.00
Side pictures instructions:	Provided at least two pictures of the unit from opposite ends. The pictures should show: <ol style="list-style-type: none"> 1. Electrical disconnect and conduit 2. Gas piping 3. Economizer installed

HVAC Post-Install Survey

Please take a picture of unit from each side



HVAC Post-Install Survey



HVAC Post-Install Survey



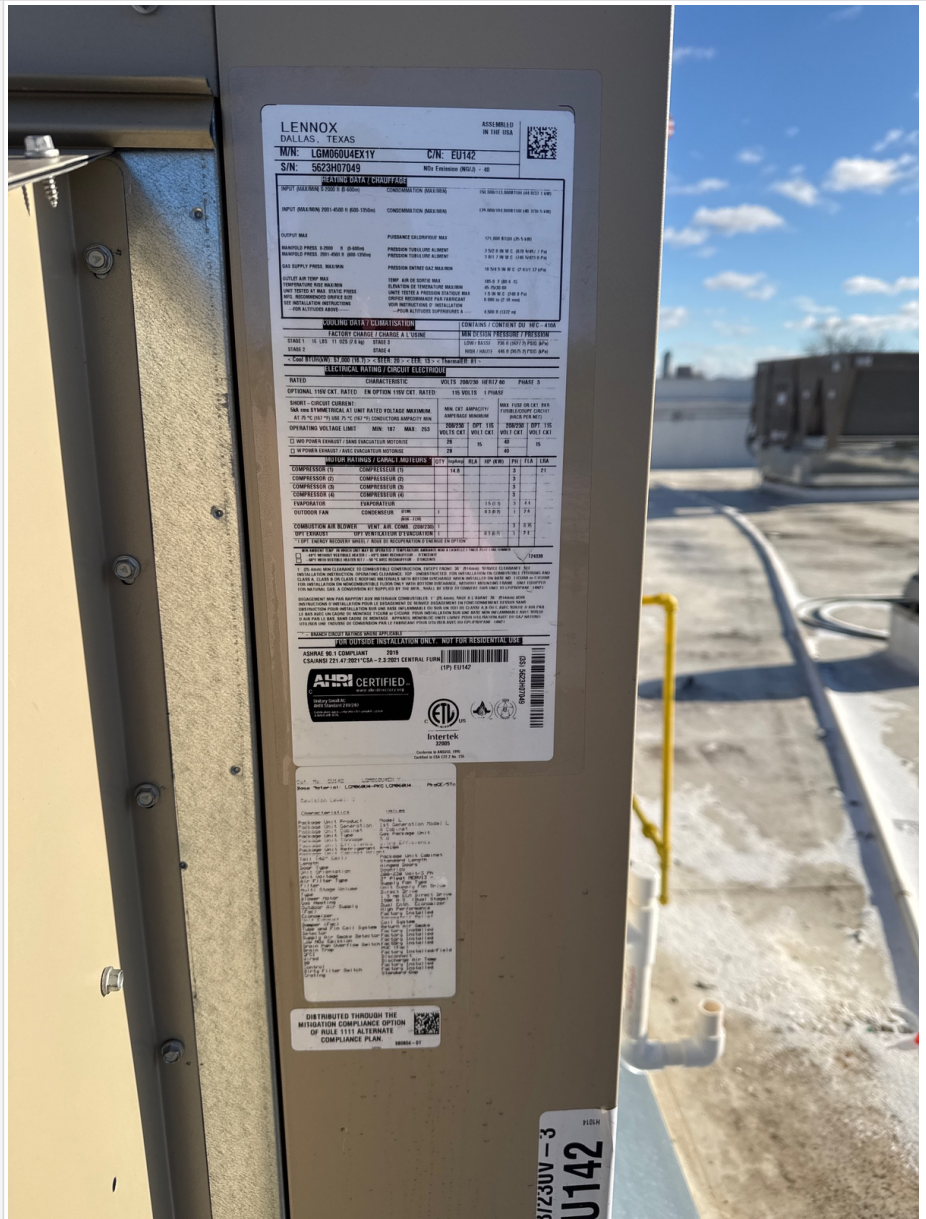
HVAC Post-Install Survey



 39.956555, -83.042470

HVAC Post-Install Survey

Please take a picture of the new unit's nameplate with location served written on it



39.956570, -83.042503

12-21-2024 10:18 AM

HVAC Post-Install Survey

Photo of smoke detector to confirm smoke detector has been moved from shipping position



HVAC Post-Install Survey



39.956556, -83.042501

HVAC Post-Install Survey

Photo of each unit secured to curb




39.956576, -83.042506

HVAC Post-Install Survey

Photo of condensate trap




 39.956574, -83.042512

HVAC Post-Install Survey

Photo of ethernet drop



 39.956584, -83.042485


Thermostat pictures instructions:

- Take 2 pictures of the thermostat
1. Take a picture of the wiring to the baseplate
 2. Take a picture of the thermostat installed on the wall

HVAC Post-Install Survey

Please take a picture of the unit's thermostat screen showing blue Wi-Fi symbol and physical labeling



 39.956491, -83.042447

Controller pictures instructions:

Take 3 pictures of different controller screens to prove proper configuration. These are to include:

1. Thermostat control (Adaptive TSTAT disabled).
2. Minimum outside air position
3. Fan speed setups

HVAC Post-Install Survey

Add pictures or screenshots of controller configuration screens



 39.956591, -83.042500


HVAC Post-Install Survey

Add picture of physical economizer installation and economizer configurations in controller



HVAC Post-Install Survey



 39.956575, -83.042521

Describe condition of make-up air unit(s) and exhaust fan(s) on-site. Do any appear to need maintenance?	
Pre Start Up Checklist	Pre Start Up Checklist
Verify that all packaging materials have been removed from unit	Yes
Verify installation of outdoor air hood	Yes
Verify installation of flue exhaust and inlet hood (gas units only)	Yes


HVAC Post-Install Survey

Verify that condensate connection is installed per installation instructions	Yes
Verify that all electrical connections and terminals are tight	Yes
Verify gas pressure to unit gas valve is within specified range (gas units only)	Yes
Check gas pipe for leaks (gas units only)	Yes
Check that indoor air filters are clean and in place	Yes
Check that outdoor air inlet screens are in place	Yes
Verify that unit is level	Yes
Check outdoor fan propeller for location in housing/orifice and verify setscrew is tight	Yes
Verify that scroll compressors are rotating in the correct direction	Yes
Verify installation of thermostat/space sensor	Yes
Verify configuration values for electronic controls (based on Control set up checklist)	Yes
Verify that crankcase heaters have been energized for at least 24 hours	Yes
Verify convenience outlet is wired	Yes
Verify transformer tabs incorrect location. Voltage across RC should be between 25-27 Volts	Yes
Verify economizer moves freely without binding on wires or filters rack	Yes
Verify fan and blower set screws tightened and built aligned	Yes

HVAC Post-Install Survey

Please take photos of completed back of manual warranty sheets (note electrical values below can be taken from this)



	 39.956601, -83.042520
Start Up - Electrical	Start Up - Electrical
Supply Voltage L1-L2	212.00
Supply Voltage L2-L3	212.00
Supply Voltage L3-L1	209.00
Compressor Amps Speed 1 - 2500 rpm L1	12.50
Compressor Amps Speed 1 - 2500 rpm L2	12.50
Compressor Amps Speed 1 - 2500 rpm L3	12.60

HVAC Post-Install Survey


Compressor Amps Speed 2 - 4500 rpm L1	
Compressor Amps Speed 2 - 4500 rpm L2	
Compressor Amps Speed 2 - 4500 rpm L3	
Electric Heat Amps L1 (if applicable)	
Electric Heat Amps L2 (if applicable)	
Electric Heat Amps L3 (if applicable)	
Supply Fan Amps at Max Speed L1	3.50
Supply Fan Amps at Max Speed L2	3.50
Supply Fan Amps at Max Speed L3	3.40
Start Up Temperatures	Start Up Temperatures
Outdoor Air Temperature F Dry Bulb	32.00
Return Air Temperature F Dry Bulb	70.00
Cooling Supply Air Temperature F Dry Bulb (Ideal differential 20F (+/- 5F))	50.00
Gas Heat Supply Air Temperature F (if applicable) (Ideal differential 20F (+/- 5F))	123.00
Electric Heat Supply Air Temperature F (if applicable) (Ideal differential 20F (+/- 5F))	0.00
Start Up Pressures	Start Up Pressures
Gas Inlet Pressure (in wg)	10.00
Gas Manifold Pressure Stage 1 (in wg)	1.50
Gas Manifold Pressure Stage 2 (in wg)	3.50
Refrigeration Suction Circuit A (psig)	130.00
Refrigeration Suction Circuit A Superheat deg F	15.00
Refrigeration Discharge Circuit A (psig)	212.00
Refrigeration Discharge Circuit A Subcooling deg F	10.00

HVAC Post-Install Survey

Verify refrigerant charge using charging charts	Yes
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Post-Install Unit Air Flow #1

Section 1

Is the economizer fully operational?	Yes
	 39.956564, -83.042494
Outside air intake damper minimum position: (Target: X> 5%)	4

Post-Install Unit Connectivity #1

RTU Post Install Survey

HVAC Serial Number	5623H07049
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HVAC Post-Install Survey

Take a photo of the RTU number (It may be handwritten on the RTU or on a decal/sticker)



39.956557, -83.042505

Where is the RTU located on site?

ROOF

Type of RTU

Lennox RTU

Other Type of RTU

Take a photo of the HVAC RTU controller display - showing the MAC Address you entered

Take a photo of the HVAC RTU controller display - showing the BAUD rate you entered

Take a photo of the HVAC RTU controller display - showing the BAS Protocol you picked

HVAC Post-Install Survey

Take a photo of the HVAC RTU controller - showing the BAS terminals wired with 3 wires distinctively colored	
Take a photo of the BACnet router - showing the COM1 terminals with 3 wires distinctively colored	
Take a photo of the BACnet router - showing the Ethernet port's 2 LEDs illuminated	
Take a photo of the BACnet router - showing the power terminals connected to the DC power supply	
Take a photo of the BACnet router - showing the 6 front LEDs illuminated	
Take a photo of the BACnet router - showing the label printed by Budderfly	
Take a photo of the Network Switch in Budderfly's network enclosure - showing the Ethernet port connected to the BACnet router from the other end of the cable	
Take a photo of the ethernet cable plugged into the Lennox Controller	
Take a photo of the ethernet cable plugged into the Budderfly Network Switch	
A Photo of the Lennox Controller after successful connection and the WIFI LED is steady green	
Instruction	The remaining questions require you uploading screenshots from the core controller app. You need screens for the "Network Setup Option" and the following parameters: Network, Device Instance, Control Mode, IP Configuration, Remote Service Access.
Take a screenshot of the core controller app after you pair the RTU successfully	
Take a screenshot of the core controller app (Network Setup) - "Network Setup Option"	
Take a screenshot of the core controller app (Network Setup) - "Network" parameter	
Take a screenshot of the core controller app (Network Setup) - "Device Instance" parameter	
Take a screenshot of the core controller app (Network Setup) - "Control Mode" parameter	

HVAC Post-Install Survey

Take a screenshot of the core controller app (Network Setup) - "IP Configuration" parameter	
Take a screenshot of the core controller app (Network Setup) - "Remote Service Access" parameter	
Instruction	We need clear indication that the cable was run for each HVAC unit. If there are 4 HVAC units then 4 cables are to be run and pics of each cable needs to be included in the survey.
Please provide pics of the Ethernet cable run from the connectivity switch to the HVAC unit(s)	
Please contact the Budderfly Support team at 475-270-4895 with any issues during install and for validating that a proper checkout has been completed.	

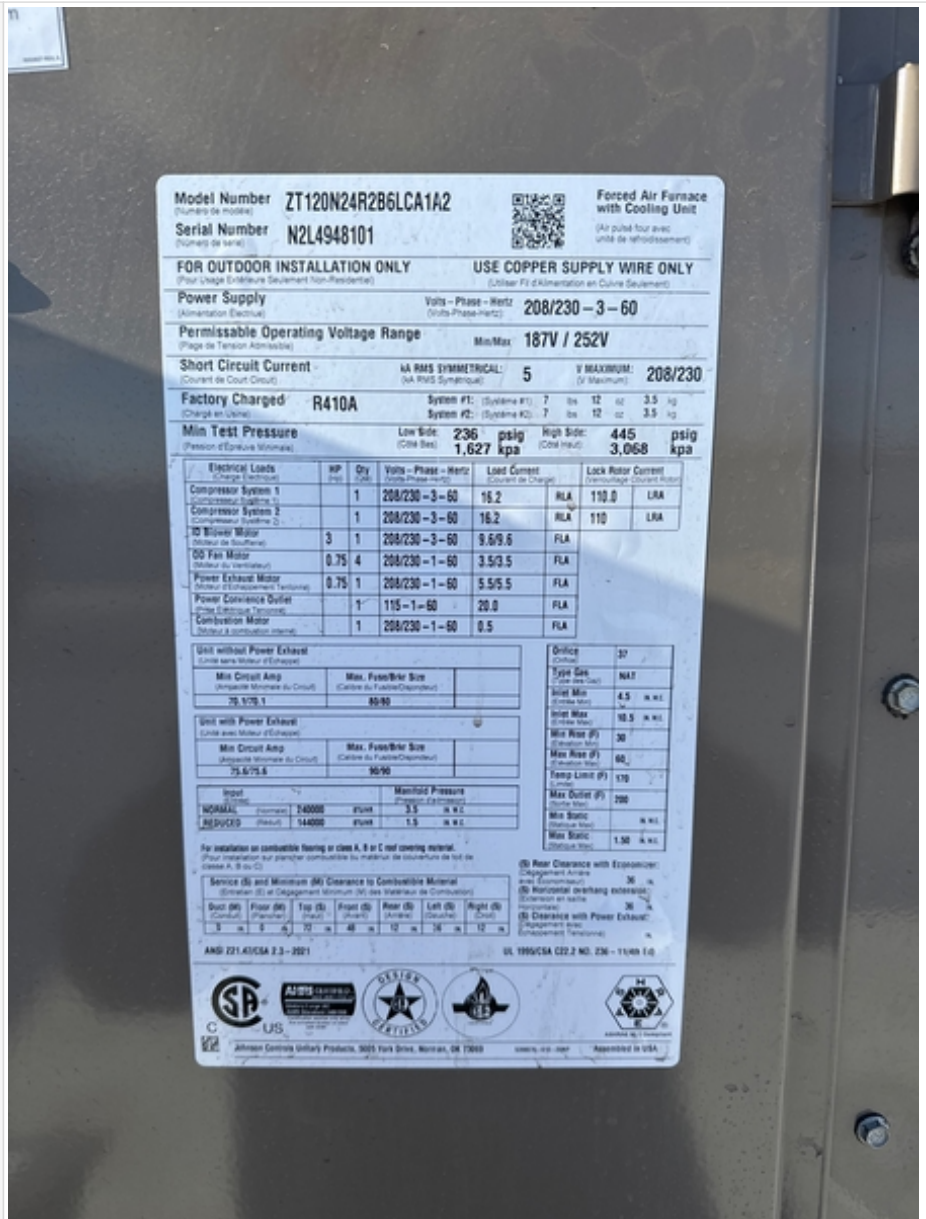
Post-Install Unit Overview #2

Post Install HVAC Unit Details

equipment_type	HVAC
Type of unit?	Packaged Unit
Unit Location	South
Area Served	Dining Room
Manufacturer	YORK
Model #	ZT120N24R2B6LCA1A2
Serial #	N2L4948101
Enter the tonnage of the unit	10.00

HVAC Post-Install Survey

Please take a picture of the replaced unit's nameplate



	39.956575, -83.042308 12-21-2024 10:28 AM
Replaced Unit Manufacturer	YORK
Replaced Unit Model	ZT120N24R2B6LCA1A2
Replaced Unit Serial Number	N2L4948101
Replaced Unit Tonnage	10.00
Side pictures instructions:	<p>Provided at least two pictures of the unit from opposite ends. The pictures should show:</p> <ol style="list-style-type: none"> 1. Electrical disconnect and conduit 2. Gas piping 3. Economizer installed

HVAC Post-Install Survey

Please take a picture of unit from each side



HVAC Post-Install Survey



HVAC Post-Install Survey



HVAC Post-Install Survey



17 39.956531, -83.042331

HVAC Post-Install Survey

Please take a picture of the new unit's nameplate with location served written on it

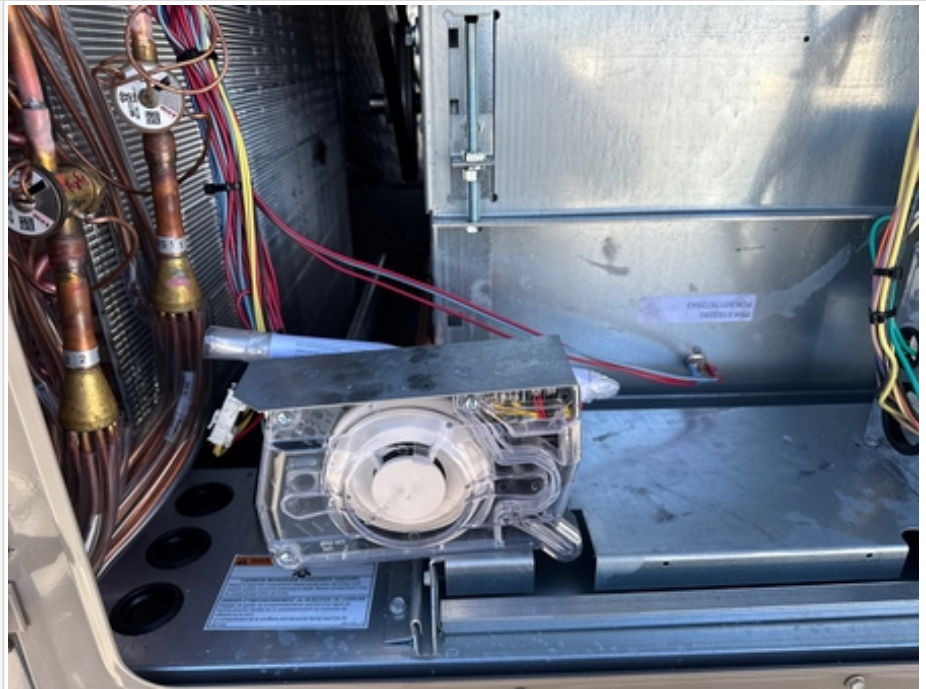


18 39.956567, -83.042323

12-21-2024 10:30 AM

HVAC Post-Install Survey

Photo of smoke detector to confirm smoke detector has been moved from shipping position



19 39.956584, -83.042354

Photo of each unit secured to curb



20 39.956584, -83.042354

HVAC Post-Install Survey

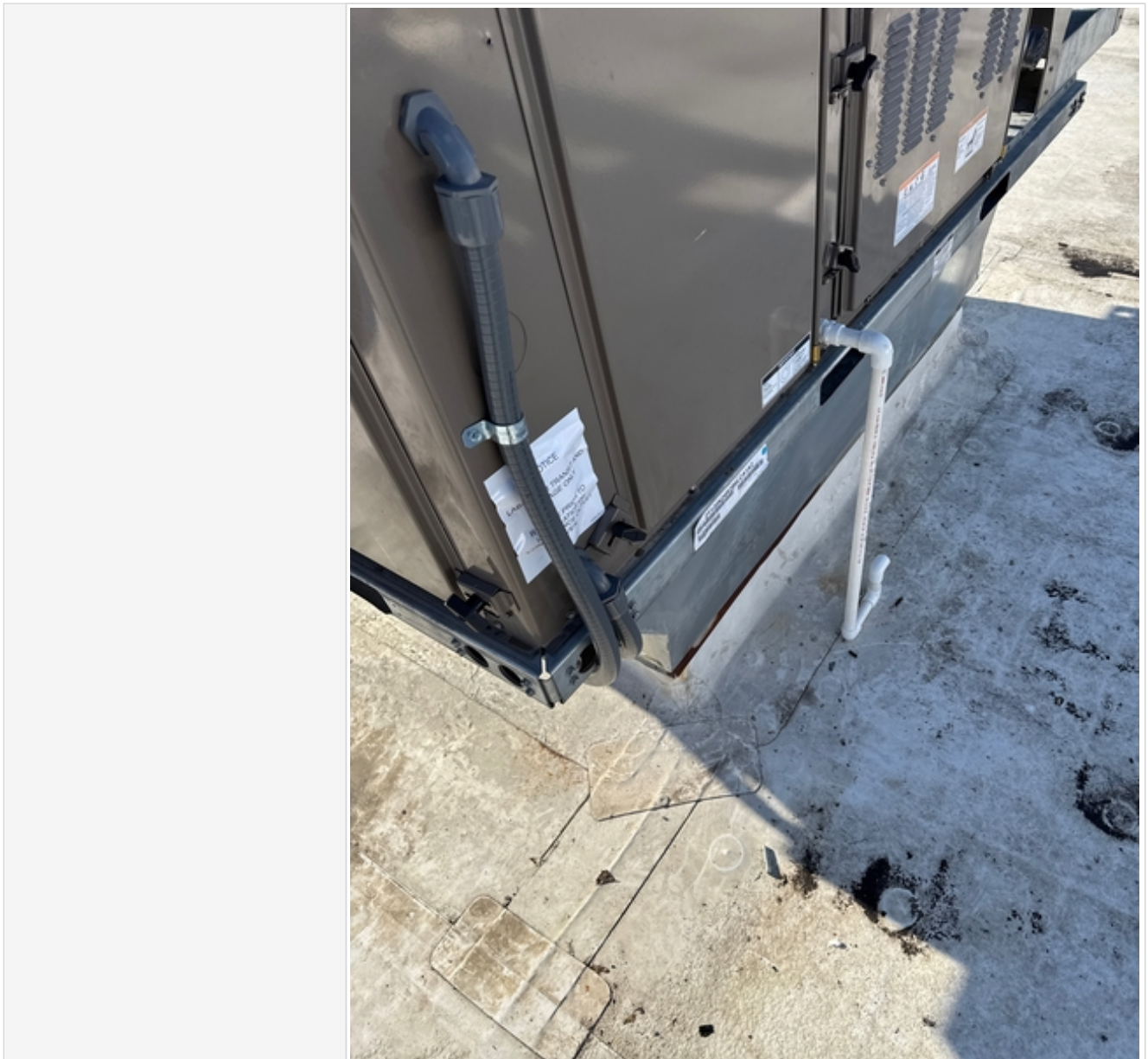
Photo of condensate trap



HVAC Post-Install Survey



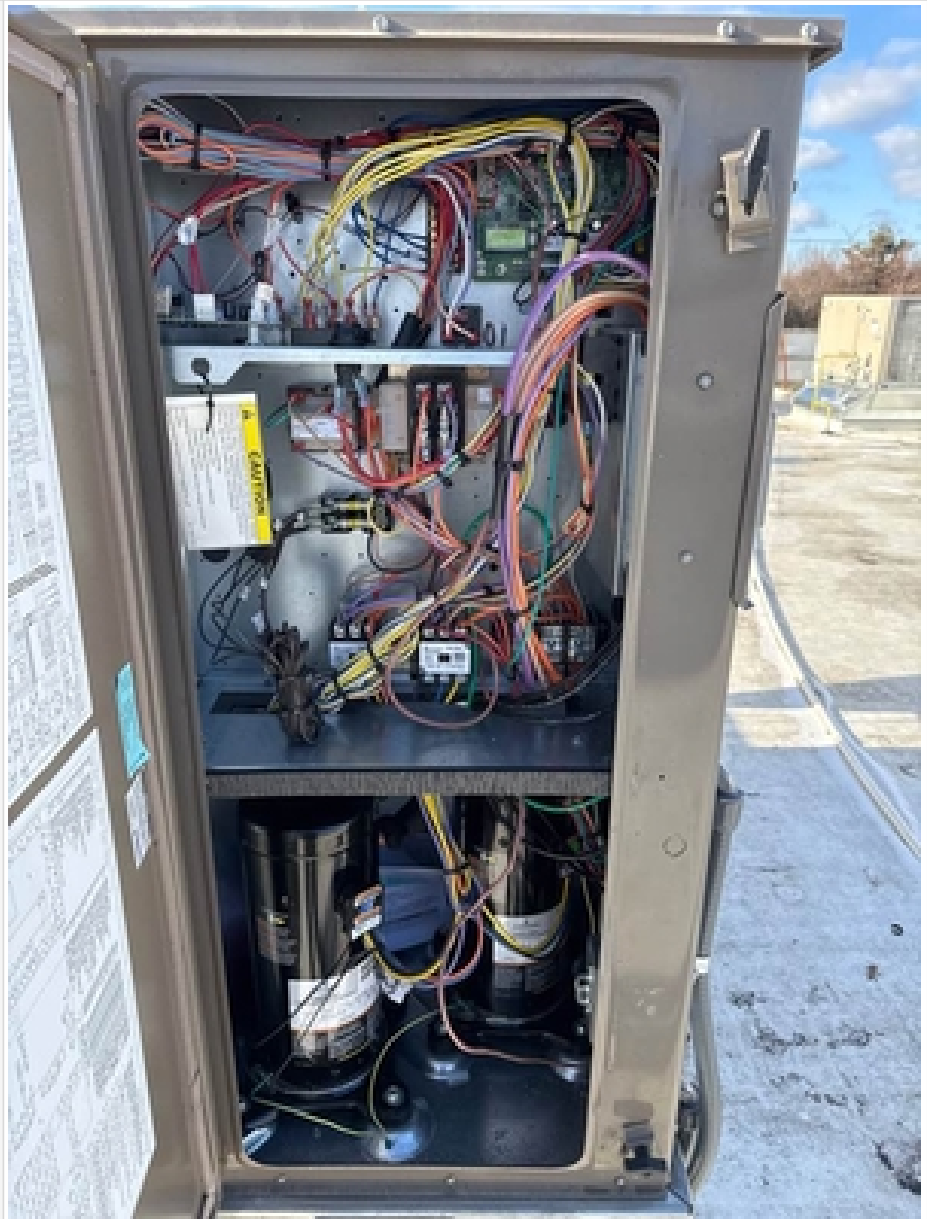
HVAC Post-Install Survey



21 39.956575, -83.042334

HVAC Post-Install Survey

Photo of ethernet drop



22 39.956573, -83.042350


Thermostat pictures instructions:

- Take 2 pictures of the thermostat
1. Take a picture of the wiring to the baseplate
 2. Take a picture of the thermostat installed on the wall

HVAC Post-Install Survey

Please take a picture of the unit's thermostat screen showing blue Wi-Fi symbol and physical labeling



 39.956675, -83.042499

Controller pictures instructions:


Take 3 pictures of different controller screens to prove proper configuration. These are to include:

1. Thermostat control (Adaptive TSTAT disabled).
2. Minimum outside air position
3. Fan speed setups

HVAC Post-Install Survey

Add pictures or screenshots of controller configuration screens



 39.956574, -83.042357

HVAC Post-Install Survey

Add picture of physical economizer installation and economizer configurations in controller



 39.956572, -83.042329

Describe condition of make-up air unit(s) and exhaust fan(s) on-site. Do any appear to need maintenance?

Pre Start Up Checklist

Pre Start Up Checklist

Verify that all packaging materials have been removed from unit

Yes

Verify installation of outdoor air hood

Yes

Verify installation of flue exhaust and inlet hood (gas units only)

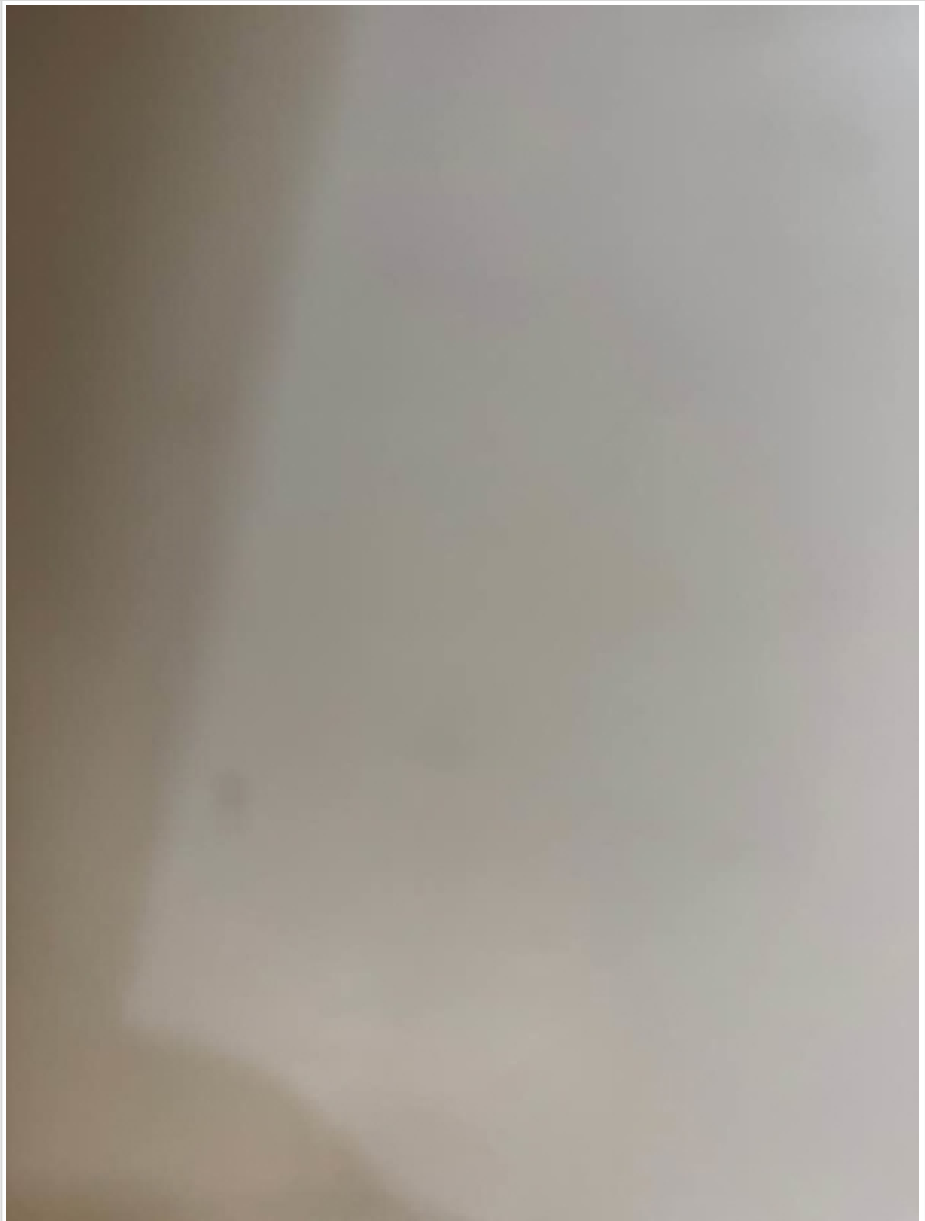
Yes

HVAC Post-Install Survey

Verify that condensate connection is installed per installation instructions	Yes
Verify that all electrical connections and terminals are tight	Yes
Verify gas pressure to unit gas valve is within specified range (gas units only)	Yes
Check gas pipe for leaks (gas units only)	Yes
Check that indoor air filters are clean and in place	Yes
Check that outdoor air inlet screens are in place	Yes
Verify that unit is level	Yes
Check outdoor fan propeller for location in housing/orifice and verify setscrew is tight	Yes
Verify that scroll compressors are rotating in the correct direction	Yes
Verify installation of thermostat/space sensor	Yes
Verify configuration values for electronic controls (based on Control set up checklist)	Yes
Verify that crankcase heaters have been energized for at least 24 hours	Yes
Verify convenience outlet is wired	Yes
Verify transformer tabs incorrect location. Voltage across RC should be between 25-27 Volts	Yes
Verify economizer moves freely without binding on wires or filters rack	Yes
Verify fan and blower set screws tightened and built aligned	Yes

HVAC Post-Install Survey

Please take photos of completed back of manual warranty sheets (note electrical values below can be taken from this)



 39.956516, -83.042458

Start Up - Electrical	Start Up - Electrical
Supply Voltage L1-L2	212.00
Supply Voltage L2-L3	212.00
Supply Voltage L3-L1	210.00
Compressor Amps Speed 1 - 2500 rpm L1	12.50
Compressor Amps Speed 1 - 2500 rpm L2	12.50
Compressor Amps Speed 1 - 2500 rpm L3	12.60

HVAC Post-Install Survey

Compressor Amps Speed 2 - 4500 rpm L1	
Compressor Amps Speed 2 - 4500 rpm L2	
Compressor Amps Speed 2 - 4500 rpm L3	
Electric Heat Amps L1 (if applicable)	
Electric Heat Amps L2 (if applicable)	
Electric Heat Amps L3 (if applicable)	
Supply Fan Amps at Max Speed L1	3.50
Supply Fan Amps at Max Speed L2	3.50
Supply Fan Amps at Max Speed L3	3.40
Start Up Temperatures	Start Up Temperatures
Outdoor Air Temperature F Dry Bulb	32.00
Return Air Temperature F Dry Bulb	70.00
Cooling Supply Air Temperature F Dry Bulb (Ideal differential 20F (+/- 5F))	50.00
Gas Heat Supply Air Temperature F (if applicable) (Ideal differential 20F (+/- 5F))	125.00
Electric Heat Supply Air Temperature F (if applicable) (Ideal differential 20F (+/- 5F))	0.00
Start Up Pressures	Start Up Pressures
Gas Inlet Pressure (in wg)	10.00
Gas Manifold Pressure Stage 1 (in wg)	1.50
Gas Manifold Pressure Stage 2 (in wg)	3.50
Refrigeration Suction Circuit A (psig)	130.00
Refrigeration Suction Circuit A Superheat deg F	15.00
Refrigeration Discharge Circuit A (psig)	212.00
Refrigeration Discharge Circuit A Subcooling deg F	10.00


HVAC Post-Install Survey

Verify refrigerant charge using charging charts	Yes
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Post-Install Unit Air Flow #2

Section 1

Is the economizer fully operational?	Yes
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	 39.956561, -83.042318
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Outside air intake damper minimum position: (Target: X> 5%)	4
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Post-Install Unit Connectivity #2

RTU Post Install Survey

HVAC Serial Number	N2L4948101
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HVAC Post-Install Survey

Take a photo of the HVAC nameplate



29 39.956580, -83.042331

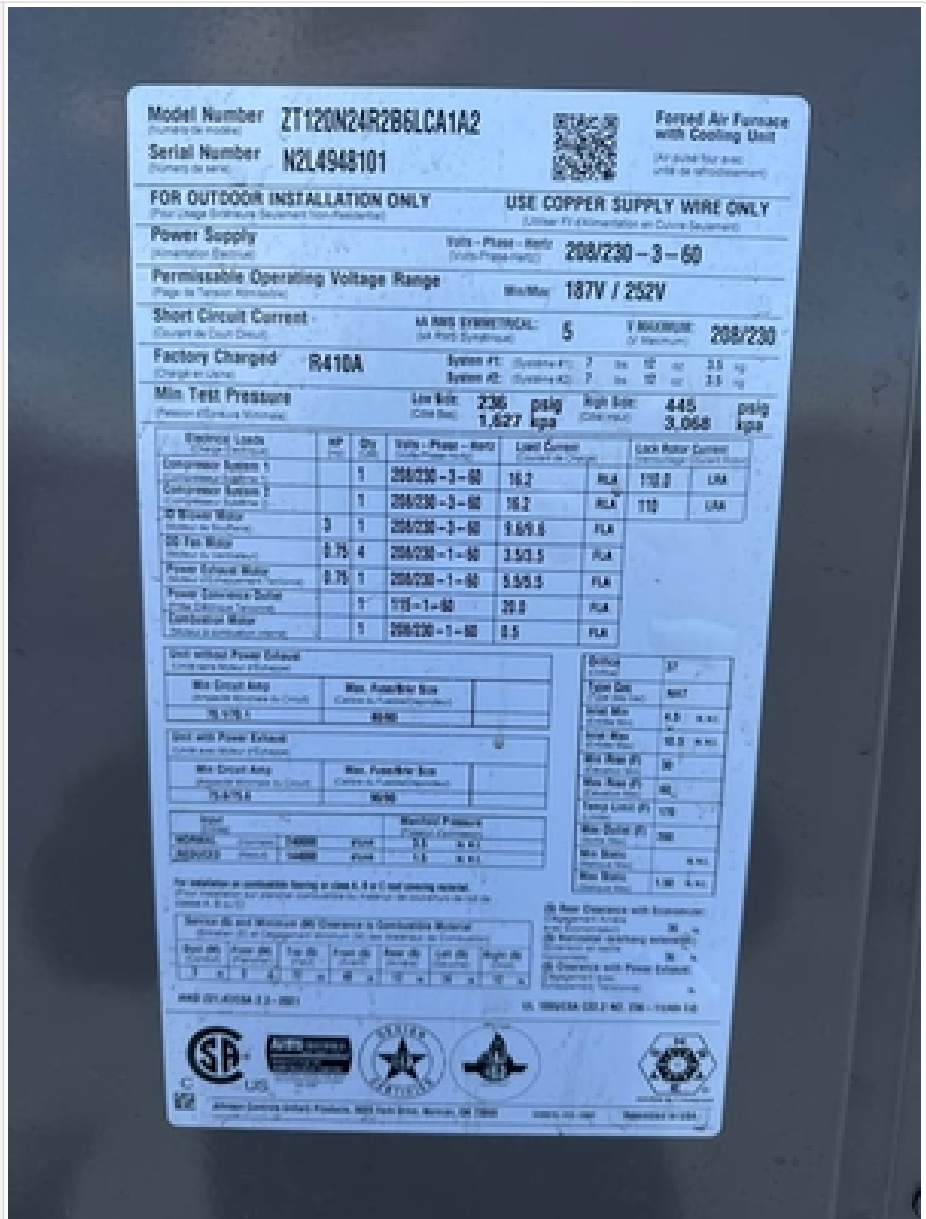
12-21-2024 10:40 AM

Area served by HVAC

DINING ROOM

HVAC Post-Install Survey

Take a photo of the RTU number (It may be handwritten on the RTU or on a decal/sticker)



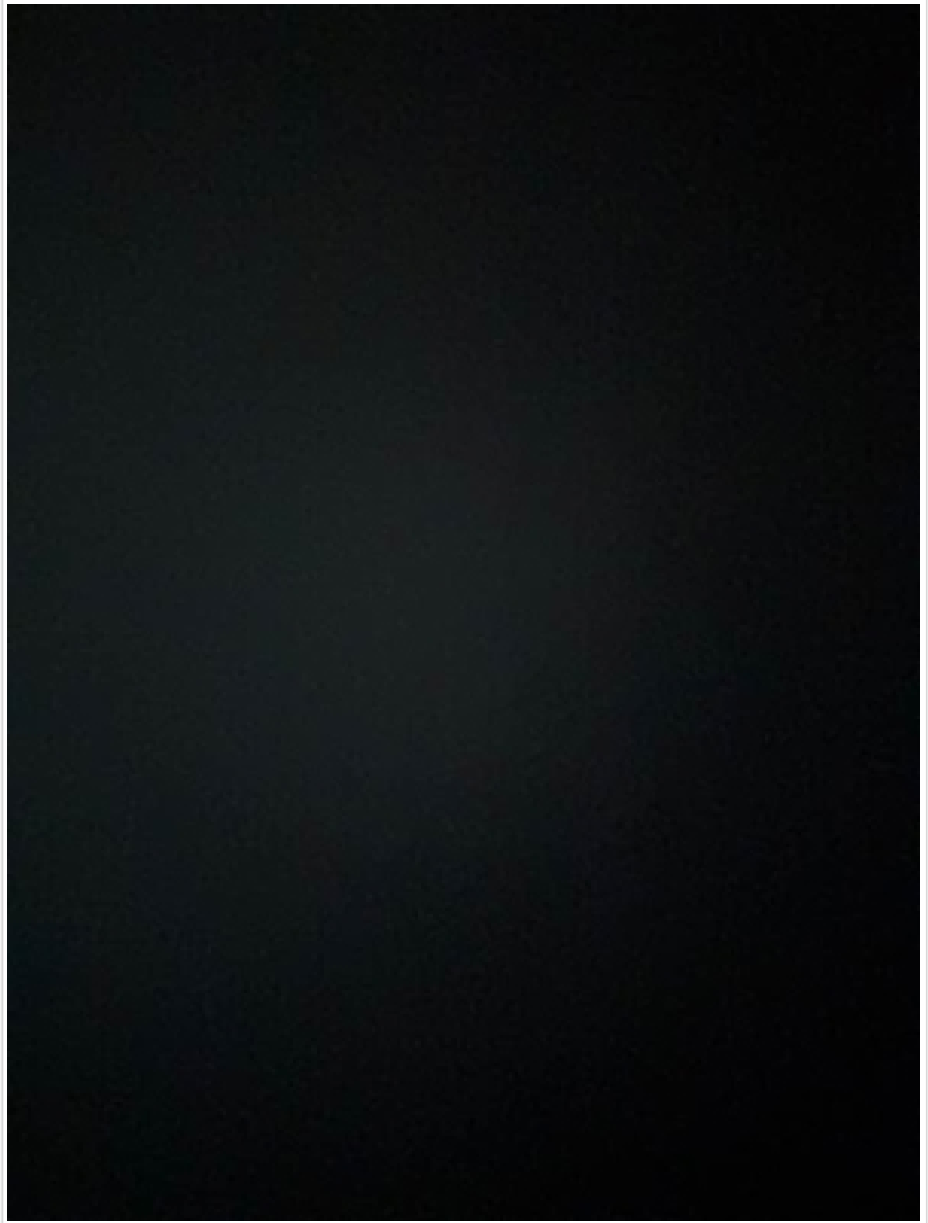

39.956578, -83.042336

Where is the RTU located on site?	ROOF
Type of RTU	Other
Other Type of RTU	YORK
Take a photo of the HVAC RTU controller display - showing the MAC Address you entered	
Take a photo of the HVAC RTU controller display - showing the BAUD rate you entered	
Take a photo of the HVAC RTU controller display - showing the BAS Protocol you picked	

HVAC Post-Install Survey

Take a photo of the HVAC RTU controller - showing the BAS terminals wired with 3 wires distinctively colored	
Take a photo of the BACnet router - showing the COM1 terminals with 3 wires distinctively colored	
Take a photo of the BACnet router - showing the Ethernet port's 2 LEDs illuminated	
Take a photo of the BACnet router - showing the power terminals connected to the DC power supply	
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Take a photo of the BACnet router - showing the label printed by Budderfly	
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Take a screenshot of the core controller app (Network Setup) - "Device Instance" parameter	
Take a screenshot of the core controller app (Network Setup) - "Control Mode" parameter	

HVAC Post-Install Survey

<p>Take a screenshot of the core controller app (Network Setup) - "IP Configuration" parameter</p>	
<p>Take a screenshot of the core controller app (Network Setup) - "Remote Service Access" parameter</p>	
<p>Instruction</p>	<p>We need clear indication that the cable was run for each HVAC unit. If there are 4 HVAC units then 4 cables are to be run and pics of each cable needs to be included in the survey.</p>
<p>Please provide pics of the Ethernet cable run from the connectivity switch to the HVAC unit(s)</p>	
	<p> 39.956471, -83.042362</p>

HVAC Post-Install Survey

Please contact the Budderfly Support team at 475-270-4895 with any issues during install and for validating that a proper checkout has been completed.	
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Signature

Instruction	Please walk through the work area and explain to the Manager on Duty the work that was performed. Afterward, have the Manager on Duty sign off
Warning	Manager on Duty: Sign off with your full name only after the Budderfly technician has walked you through the work performed.
Date	12-20-2024
MOD/Customer Representative Signature of Approval	BRIAN WINKLER
	12-20-2024 06:13 PM

HVAC Post-Install Survey

Form Locations

