

# Walgreens



## WAG HVAC Start-Up AES

Site ID: 3507

Address: 2126 NALL ST

City: PORT NECHES

State: TX

Zip: 77651 3716

Survey Date: 10/27/2022

---

Start-Up Date: 10/27/2022

HVAC Contractor Phone: 3349916961

Start-Up Technician: Octavious Hoffman

Contractor's Email Address: aesmech.com

Walgreens Installing HVAC Contractor: AES  
Mechanical

## RTU UNIT INFORMATION

Location Other Than Roof	Front
RTU Unit Number / Serves Store Area Description:	Rtu-1 front counter/ office
RTU Make:	York
RTU Manufacturer:	JCI
RTU Model Number:	Zt180n30r4b5gcb2c1
RTU Serial Number:	N2g2749180
RTU Cooling Tons:	15
Heating System:	Natural Gas

## RTU Unit Name Plate Photo



## RTU Walgreens Asset Tag Photo



Scan RTU Walgreens Asset Tag Barcode Number:	WG0000524741
JCI Warranty Registration Completed?	Yes
Installed Temperature Control Serving this Unit:	FSG Jene reprogrammed

## RTU GENERAL INSPECTION

RTU Refrigeration System Checked for Gross Leaks	Completed
RTU Terminal Screws and Wiring Connections Checked for Tightness	Completed
Air Filters Installed Correctly and Clean	Completed

## Installed RTU Air Filter Photo



**RTU Economizer Hoods Installed in Operating Position**

Completed

**Installed RTU Economizer Photo**



**RTU Condensate Drain CostGard System Installed Properly**

Completed

**RTU Condensate Drain Extended to Nearest Roof Drain**

Completed

**Installed RTU Condensate Drain Photo**



**RTU Economizer Damper Linkage Tight**

Completed

**Completed RTU Economizer Damper Linkage Photo**



**RTU Gas Heat Vent Hood Installed**

Completed

**Installed RTU Gas Heat Vent Hood Photo**



**All RTU Field Power Wiring Complete**

Completed

All RTU Field Power Wiring Photo



All RTU Field Control Wiring Complete

Completed

All RTU Field Control Wiring Photo



All RTU Field Natural Gas / Propane Piping Complete

Completed

All RTU Field Natural Gas / Propane Piping Photo



RTU Gas Shut-Off Valve in ON Position

Completed

RTU Gas Shut-Off Valve in ON Position Photo



RTU Correctly Labeled on Exterior Using 4 inch x 2 inch Exterior Reflective Labels with RTU # Designation

Completed

RTU Label Photo



Seismic Adapter Clips Furnished and Installed on RTU

Yes

If Seismic Adapter Clips Furnished and Installed on RTU, take Photo



All 5 Sides of Installed Unit of RTU - Including Top with Condensor Fan Section.



Interior Pictures of RTU Blower Section, Power / Control Section, Heat Section, Compressor Section.



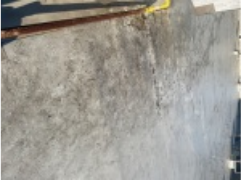
Complete / Clear Pictures of All RTU Condenser Coil and Evaporator Coil Surfaces.



All RTU Electric and Heat Utility Piping Through Roof and All Connections / Penetrations at the Unit.



Roof Areas Around RTU Unit Showing the Areas are Clean and Free of Any Debris or Damage Related to the Installation.



## AIR MOVING INSPECTION

Alignment of RTU Drive Components

Completed

Alignment of RTU Drive Component Photo



Alignment of Blower Pulley Key Flush with End of Blower Shaft



RTU Belt Tension Adjusted Properly

Completed

RTU Blower Pulleys Tight on Shaft, Bearing Set Screws Tight, Wheel Tight to Shaft.

Completed

RTU Pressure Switch or Transducer Tubing Installed Properly

Completed

## EXHAUST INSPECTION

Exhaust Type

Barometric Relief

Check Hub for Tightness

Complete

Check Fan Blade for Clearance

N/A

Check for Proper Rotation

Complete

Check for Proper Mounting

Complete

Prove Operation by Increasing Minimum Setting on Economizer

Complete

## ECONOMIZER INSPECTION

Economizer Type

Standard

C02 Sensor Installed

N/A

Check Single Enthalpy Economizer Setting

Completed

Reheat / Indoor Humidity Sensor Location Return Air at RTU

Reheat / Indoor Humidity Sensor Wired to RTU Control Board Completed

Installed Reheat / Indoor Humidity Sensor Photo showing installed location



Outdoor Humidity Sensor Wired to Economizer Control Board Completed

Prove Economizer Open / Close Through PC or Control Module Completed

**REHEAT MODE**

Set Reheat Mode to Alternate or Not Applicable Completed

**RTU BLOWER INFORMATION**

RTU Blower Motor Rated HP 7.5

RTU Blower Motor Rated FLA 9.7

RTU Blower Motor Rated RPM 1750

Check Proper Rotation of RTU Supply Fan Completed

RTU Blower Motor Controlled by VFD Yes

RTU Direct Drive Blower Motor No

**RTU ELECTRICAL DATA - VOLTAGE**

RTU Line Input Voltage 460-480 / 3 / 60

Line Input Voltage	
L1	481
L2	480
L3	481

	Nameplate	L1	L2	L3
Supply Fan Motor	9.7	5.7	5.6	5.6
Condenser Fan #1	1.6	1.2	1.3	1.3
Condenser Fan #2 (if equipped)	1.6	1.3	1.2	1.2
Condenser Fan #3 (if equipped)	1.6	1.2	1.2	1.2
Condenser Fan #4 (if equipped)	1.6	1.2	1.3	1.3
Compressor #1	9.6	4.0	4.2	4.1
Compressor #2 (if equipped)	9.6	4.1	4.1	4.1

	Outside Air Temp	Return Air Temp	Mixed Air Temp	Supply Air Temp
F db	80	71		56

	Discharge Pressure	Discharge Temp	Liquid Line Temp Befor LL Drier	Subcooling	Suction Pressure	Suction Temp.	Superheat
Stage 1	195	68			125	42	
Stage 2	199	69			131	42	

## RTU REFRIGERANT SAFETIES

Prove RTU Compressor Rotation (3 phase only) by gauge pressure

Completed

Prove RTU High Pressure Safety, All Systems

Completed

Prove RTU Low Pressure Safety, All Systems

Completed

## RTU OPERATING MEASUREMENTS - GAS HEATING

Fuel Type:

Natural Gas

Check RTU for Gas Leaks

Completed

Prove RTU Venter Motor Operation

Completed

Prove RTU Primary Safety Operation

Completed

Prove RTU Auxiliary Safety Operation

Completed

Prove RTU Rollout Switch Operation

Completed

Prove RTU Smoke Detector Operation

Completed

RTU Temperature Rise Measured at Full Fire

Yes

RTU Temperature Rise

120

## RTU OPERATING MEASUREMENTS - ELECTRIC HEATING

Electric Heat Installed

No

## OPERATIONAL MEASUREMENTS - STAGING CONTROLS

Create a RTU cooling demand at the Thermostat, BAS System or Simplicity PC Verify that cooling/economizer stages are energized.

Yes

Create a RTU heating demand at the Thermostat, BAS System or Simplicity PC Verify that heating stages are energized.

Yes

Verify that RTU motor speed modulates with duct pressure change.

Yes

## FINAL INSPECTION

Run All RTU Gas / Electric Heating Systems at Full Capacity for a minimum of 20 Minutes to Burn Off any impurities on the heating section materials. Place Fire Alarm Panel in Test and Inform Store Management that burning odor may be present for a short time but is normal for new equipment at Start-up.

Completed

Verify that all RTU operational control set points have been set to Walgreens desired value Scroll through all setpoints and verify all have been set to Walgreens specifications.

Yes

Verify that all RTU option parameters are correct. Scroll through all option parameters and ensure that all installed options are enabled in the software and all others are disabled in the software.

Yes

RTU - Verify & Confirm that Fire Alarm Panel has been taken out of Test and No Zones are signaling Trouble. Yes

### RTU UNIT INFORMATION

Location Other Than Roof Middle

RTU Unit Number / Serves Store Area Description: Rtu-2 sales floor

RTU Make: York

RTU Manufacturer: JCI

RTU Model Number: Zt120n18r4b5gc12r1

RTU Serial Number: N2k2935593

RTU Cooling Tons: 10

Heating System: Natural Gas

#### RTU Unit Name Plate Photo



#### RTU Walgreens Asset Tag Photo



Scan RTU Walgreens Asset Tag Barcode Number: WG0000524742

JCI Warranty Registration Completed? Yes

Installed Temperature Control Serving this Unit: FSG Jene reprogrammed

### RTU GENERAL INSPECTION

RTU Refrigeration System Checked for Gross Leaks Completed

RTU Terminal Screws and Wiring Connections Checked for Tightness Completed

Air Filters Installed Correctly and Clean Completed

Installed RTU Air Filter Photo



RTU Economizer Hoods Installed in Operating Position

Completed

Installed RTU Economizer Photo



RTU Condensate Drain CostGard System Installed Properly

Completed

RTU Condensate Drain Extended to Nearest Roof Drain

Completed

Installed RTU Condensate Drain Photo



RTU Economizer Damper Linkage Tight

Completed

Completed RTU Economizer Damper Linkage Photo



RTU Gas Heat Vent Hood Installed

Completed

Installed RTU Gas Heat Vent Hood Photo



All RTU Field Power Wiring Complete

Completed

All RTU Field Power Wiring Photo



All RTU Field Control Wiring Complete

Completed

All RTU Field Control Wiring Photo



All RTU Field Natural Gas / Propane Piping Complete

Completed

All RTU Field Natural Gas / Propane Piping Photo



RTU Gas Shut-Off Valve in ON Position

Completed

RTU Gas Shut-Off Valve in ON Position Photo



RTU Correctly Labeled on Exterior Using 4 inch x 2 inch Exterior Reflective Labels with RTU # Designation

Completed

RTU Label Photo



Seismic Adapter Clips Furnished and Installed on RTU

Yes

If Seismic Adapter Clips Furnished and Installed on RTU, take Photo



All 5 Sides of Installed Unit of RTU - Including Top with Condensor Fan Section.



Interior Pictures of RTU Blower Section, Power / Control Section, Heat Section, Compressor Section.



Complete / Clear Pictures of All RTU Condenser Coil and Evaporator Coil Surfaces.



All RTU Electric and Heat Utility Piping Through Roof and All Connections / Penetrations at the Unit.



Roof Areas Around RTU Unit Showing the Areas are Clean and Free of Any Debris or Damage Related to the Installation.



### AIR MOVING INSPECTION

Alignment of RTU Drive Components Completed

Alignment of RTU Drive Component Photo



Alignment of Blower Pulley Key Flush with End of Blower Shaft



RTU Belt Tension Adjusted Properly Completed

RTU Blower Pulleys Tight on Shaft, Bearing Set Screws Tight, Wheel Tight to Shaft. Completed

RTU Pressure Switch or Transducer Tubing Installed Properly Completed

### EXHAUST INSPECTION

Exhaust Type Barometric Relief

Check Hub for Tightness Complete

Check Fan Blade for Clearance N/A

Check for Proper Rotation N/A

Check for Proper Mounting	Complete
Prove Operation by Increasing Minimum Setting on Economizer	Complete

## ECONOMIZER INSPECTION

Economizer Type	Standard
C02 Sensor Installed	Complete

### Installed C02 Sensor Photo



Check Single Enthalpy Economizer Setting	Completed
Reheat / Indoor Humidity Sensor Location	Return Air at RTU
Reheat / Indoor Humidity Sensor Wired to RTU Control Board	Completed

### Installed Reheat / Indoor Humidity Sensor Photo showing installed location



Outdoor Humidity Sensor Wired to Economizer Control Board	Completed
Prove Economizer Open / Close Through PC or Control Module	Completed

## REHEAT MODE

Set Reheat Mode to Alternate or Not Applicable	Completed
--	-----------

## RTU BLOWER INFORMATION

RTU Blower Motor Rated HP	3
RTU Blower Motor Rated FLA	4.7
RTU Blower Motor Rated RPM	1750
Check Proper Rotation of RTU Supply Fan	Completed
RTU Blower Motor Controlled by VFD	Yes
RTU Direct Drive Blower Motor	No

## RTU ELECTRICAL DATA - VOLTAGE

RTU Line Input Voltage	460-480 / 3 / 60
------------------------	------------------

Line Input Voltage	
L1	479
L2	480
L3	480

	Nameplate	L1	L2	L3
Supply Fan Motor	4.7	3.3	3.2	3.2
Condenser Fan #1	1.6	1.2	1.2	1.2
Condenser Fan #2 (if equipped)	1.6	1.2	1.3	1.3
Condenser Fan #3 (if equipped)	1.6	1.3	1.2	1.2
Condenser Fan #4 (if equipped)	1.6	1.2	1.2	1.2
Compressor #1	7.6	3.5	3.5	3.4
Compressor #2 (if equipped)	7.6	3.6	3.6	3.5

	Outside Air Temp	Return Air Temp	Mixed Air Temp	Supply Air Temp
F db	80	71		57

	Discharge Pressure	Discharge Temp	Liquid Line Temp Befor LL Drier	Subcooling	Suction Pressure	Suction Temp.	Superheat
Stage 1	197	68			135	47	
Stage 2	204	69			140	46	

## RTU REFRIGERANT SAFETIES

Prove RTU Compressor Rotation (3 phase only) by gauge pressure

Completed

Prove RTU High Pressure Safety, All Systems

Completed

Prove RTU Low Pressure Safety, All Systems

Completed

## RTU OPERATING MEASUREMENTS - GAS HEATING

Fuel Type:

Natural Gas

Check RTU for Gas Leaks

Completed

Prove RTU Venter Motor Operation

Completed

Prove RTU Primary Safety Operation

Completed

Prove RTU Auxiliary Safety Operation

Completed

Prove RTU Rollout Switch Operation

Completed

Prove RTU Smoke Detector Operation

Completed

RTU Temperature Rise Measured at Full Fire

Yes

RTU Temperature Rise

121

## RTU OPERATING MEASUREMENTS - ELECTRIC HEATING

Electric Heat Installed

No

## OPERATIONAL MEASUREMENTS - STAGING CONTROLS

Create a RTU cooling demand at the Thermostat, BAS System or Simplicity PC Verify that cooling/economizer stages are energized.	Yes
Create a RTU heating demand at the Thermostat, BAS System or Simplicity PC Verify that heating stages are energized.	Yes
Verify that RTU motor speed modulates with duct pressure change.	Yes

## FINAL INSPECTION

Run All RTU Gas / Electric Heating Systems at Full Capacity for a minimum of 20 Minutes to Burn Off any impurities on the heating section materials. Place Fire Alarm Panel in Test and Inform Store Management that burning odor may be present for a short time but is normal for new equipment at Start-up.	Completed
Verify that all RTU operational control set points have been set to Walgreens desired value Scroll through all setpoints and verify all have been set to Walgreens specifications.	Yes
Verify that all RTU option parameters are correct. Scroll through all option parameters and ensure that all installed options are enabled in the software and all others are disabled in the software.	Yes
RTU - Verify & Confirm that Fire Alarm Panel has been taken out of Test and No Zones are signaling Trouble.	Yes

## RTU UNIT INFORMATION

Location Other Than Roof	Right rear
RTU Unit Number / Serves Store Area Description:	Rtu-3 pharmacy
RTU Make:	York
RTU Manufacturer:	JCI
RTU Model Number:	Zj061n08d4b5gcb2r3
RTU Serial Number:	N2k2935593
RTU Cooling Tons:	5
Heating System:	Natural Gas

## RTU Unit Name Plate Photo



## RTU Walgreens Asset Tag Photo



Scan RTU Walgreens Asset Tag Barcode Number:	WG0000524743
JCI Warranty Registration Completed?	Yes
Installed Temperature Control Serving this Unit:	FSG Jene reprogrammed

### RTU GENERAL INSPECTION

RTU Refrigeration System Checked for Gross Leaks	Completed
RTU Terminal Screws and Wiring Connections Checked for Tightness	Completed
Air Filters Installed Correctly and Clean	Completed

#### Installed RTU Air Filter Photo



RTU Economizer Hoods Installed in Operating Position	Completed
--	-----------

#### Installed RTU Economizer Photo



RTU Condensate Drain CostGard System Installed Properly	Completed
---	-----------

RTU Condensate Drain Extended to Nearest Roof Drain	Completed
---	-----------

#### Installed RTU Condensate Drain Photo



RTU Economizer Damper Linkage Tight	Completed
-------------------------------------	-----------

Completed RTU Economizer Damper Linkage Photo



RTU Gas Heat Vent Hood Installed

Completed

All RTU Field Power Wiring Complete

Completed

All RTU Field Power Wiring Photo



All RTU Field Control Wiring Complete

Completed

All RTU Field Control Wiring Photo



All RTU Field Natural Gas / Propane Piping Complete

Completed

All RTU Field Natural Gas / Propane Piping Photo



RTU Gas Shut-Off Valve in ON Position

Completed

RTU Gas Shut-Off Valve in ON Position Photo



RTU Correctly Labeled on Exterior Using 4 inch x 2 inch Exterior Reflective Labels with RTU # Designation

Completed

RTU Label Photo



Seismic Adapter Clips Furnished and Installed on RTU

Yes

If Seismic Adapter Clips Furnished and Installed on RTU, take Photo



All 5 Sides of Installed Unit of RTU - Including Top with Condensor Fan Section.



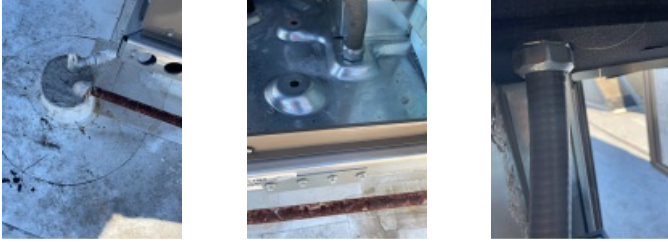
Interior Pictures of RTU Blower Section, Power / Control Section, Heat Section, Compressor Section.



Complete / Clear Pictures of All RTU Condenser Coil and Evaporator Coil Surfaces.



All RTU Electric and Heat Utility Piping Through Roof and All Connections / Penetrations at the Unit.



Roof Areas Around RTU Unit Showing the Areas are Clean and Free of Any Debris or Damage Related to the Installation.



**AIR MOVING INSPECTION**

Alignment of RTU Drive Components Completed

Alignment of RTU Drive Component Photo



Alignment of Blower Pulley Key Flush with End of Blower Shaft



RTU Belt Tension Adjusted Properly Completed

RTU Blower Pulleys Tight on Shaft, Bearing Set Screws Tight, Wheel Tight to Shaft. Completed

RTU Pressure Switch or Transducer Tubing Installed Properly Completed

**EXHAUST INSPECTION**

Exhaust Type Powered

Check Hub for Tightness Complete

Check Fan Blade for Clearance N/A

Check for Proper Rotation N/A

Check for Proper Mounting	Complete
Prove Operation by Increasing Minimum Setting on Economizer	Complete

## ECONOMIZER INSPECTION

Economizer Type	Standard
C02 Sensor Installed	Complete

### Installed C02 Sensor Photo



Check Single Enthalpy Economizer Setting	Completed
Reheat / Indoor Humidity Sensor Location	Return Air at RTU
Reheat / Indoor Humidity Sensor Wired to RTU Control Board	Completed

### Installed Reheat / Indoor Humidity Sensor Photo showing installed location



Outdoor Humidity Sensor Wired to Economizer Control Board	Completed
Prove Economizer Open / Close Through PC or Control Module	Completed

## REHEAT MODE

Set Reheat Mode to Alternate or Not Applicable	Completed
--	-----------

## RTU BLOWER INFORMATION

RTU Blower Motor Rated HP	2
RTU Blower Motor Rated FLA	3.4
RTU Blower Motor Rated RPM	1725
Check Proper Rotation of RTU Supply Fan	Completed
RTU Blower Motor Controlled by VFD	No
RTU Direct Drive Blower Motor	No

## RTU ELECTRICAL DATA - VOLTAGE

RTU Line Input Voltage	460-480 / 3 / 60
------------------------	------------------

Line Input Voltage	
L1	480
L2	481
L3	481

	Nameplate	L1	L2	L3
Supply Fan Motor	3.4	2.2	2.3	2.2
Condenser Fan #1	1.1	.9	1.0	1.1
Condenser Fan #2 (if equipped)	1.1	1.0	.9	.9
Compressor #1	6.0	2.7	2.6	2.6

F db	Outside Air Temp	Return Air Temp	Mixed Air Temp	Supply Air Temp
	80	57		56

Stage 1	Discharge Pressure	Discharge Temp	Liquid Line Temp Befor LL Drier	Subcooling	Suction Pressure	Suction Temp.	Superheat
	265	87			124	43	

### RTU REFRIGERANT SAFETIES

Prove RTU Compressor Rotation (3 phase only) by gauge pressure

Completed

Prove RTU High Pressure Safety, All Systems

Completed

Prove RTU Low Pressure Safety, All Systems

Completed

### RTU OPERATING MEASUREMENTS - GAS HEATING

Fuel Type:

Natural Gas

Check RTU for Gas Leaks

Completed

Prove RTU Venter Motor Operation

Completed

Prove RTU Primary Safety Operation

Completed

Prove RTU Auxiliary Safety Operation

Completed

Prove RTU Rollout Switch Operation

Completed

Prove RTU Smoke Detector Operation

Completed

RTU Temperature Rise Measured at Full Fire

Yes

RTU Temperature Rise

119

### RTU OPERATING MEASUREMENTS - ELECTRIC HEATING

Electric Heat Installed

No

### OPERATIONAL MEASUREMENTS - STAGING CONTROLS

Create a RTU cooling demand at the Thermostat, BAS System or Simplicity PC Verify that cooling/economizer stages are energized.

Yes

Create a RTU heating demand at the Thermostat, BAS System or Simplicity PC Verify that heating stages are energized. Yes

Verify that RTU motor speed modulates with duct pressure change. Yes

## FINAL INSPECTION

Run All RTU Gas / Electric Heating Systems at Full Capacity for a minimum of 20 Minutes to Burn Off any impurities on the heating section materials. Place Fire Alarm Panel in Test and Inform Store Management that burning odor may be present for a short time but is normal for new equipment at Start-up. Completed

Verify that all RTU operational control set points have been set to Walgreens desired value Scroll through all setpoints and verify all have been set to Walgreens specifications. Yes

Verify that all RTU option parameters are correct. Scroll through all option parameters and ensure that all installed options are enabled in the software and all others are disabled in the software. Yes

RTU - Verify & Confirm that Fire Alarm Panel has been taken out of Test and No Zones are signaling Trouble. Yes