

**CERTIFICATION OF WORK  
PREVENTIVE MAINTENANCE**

(To be completed by the Contractor and saved in the Contractor's CMMS)

FACID/Building: NY127 Date of Visit: 10/7/20

Contractor Personnel on Site:

- |                         |          |
|-------------------------|----------|
| 1. <u>PATRICK BROWN</u> | 3. _____ |
| 2. _____                | 4. _____ |

**Work Performed:**

**Preventive Maintenance** - Services Completed (Annual, Quarterly, Monthly, equipment identification, etc.)

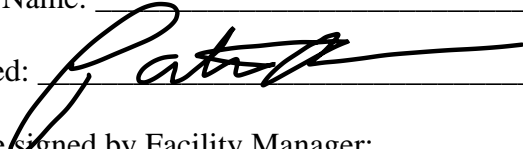
1. WO'S 9777PFQ, 10209PMQ, 10227PMS, 9778PFQ, 10197PMA, 10205PMM,
2. 10210PMQ, 10228PMS
3. FILTERS, GREASE INTERCEPTOR, CHILLER, AIR HANDLERS, HRS, CONDENSING UNITS
4. MAKEUP AIR UNIT, VFD, AIR CURTAIN, FURNACE, FAN COIL UNITS, LIGHTING
5. \_\_\_\_\_

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**CERTIFICATION OF WORK**

To be signed by the Contractor:


Print Name: Patrick Brown Date: 10/7/20

Signed: 

To be signed by Facility Manager:

By signing the Certification of Work, the said government representative signature does not constitute acceptance of any work performed by the contractor, it only acknowledges that the contractor was on-site during the identified timeline:

Print Name/Rank: Lars Luffman Date: 10/7/20

Signed: 

E-Mail: \_\_\_\_\_

**PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST**  
**AIR COOLED CHILLER, PACKAGE UNIT**

SITE AND BLDG #: NY127-01

MECHANIC  
SIGNATURE: 

DATE: 10/7/20

LOCATION/RM #:

WO# 10227

ASSET # 190917-605

START TIME: 9am

FINISH TIME: 10am

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
<b>SPECIAL INSTRUCTIONS</b>				
1	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2	No intentional venting of refrigerants is permitted. During the servicing, maintenance, and repair of refrigeration equipment, the refrigerant must be recovered.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Whenever refrigerant is added or removed from equipment, record the quantities on the appropriate forms. Forms to be maintained by technician in universal waste binder.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Recover, recycle, or reclaim the refrigerant as appropriate.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5	If disposal of the equipment item is required, follow regulations concerning removal of refrigerants and disposal of the item.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
6	If materials containing refrigerants are discarded, comply with EPA regulations as applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
7	Refrigerant oils to be treated as hazardous waste.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8	Closely follow all safety procedures described in the Safety Data Sheet (SDS) for the refrigerant and all labels on refrigerant containers.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
9	Remove access covers prior to accomplishing check points.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b>				
<b>CONDENSER</b>				
1	Remove debris from air screen and clean underneath unit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no debris
2	Pressure wash coil with proper cleaning solution.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	coil is clean
3	Straighten fin tubes with fin comb.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	fins are straight
4	Check electrical wiring and tighten loose connections. Check fused disconnect switches for condition and operation, contactors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	all are good
5	Check mounting for tightness.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	mounts are tight
6	Check for corrosion. Clean and treat with inhibitor as needed.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no corrosion
7	Check fan or blower for bent or damaged blades and imbalance.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no damage or imbalance

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
8	Lubricate shaft and motor bearings on fans and remove old or excess lubricant, if applicable.	✓	✓	
9	Inspect pulleys, belts, couplings, etc.; adjust tension and tighten mountings as necessary. Change badly worn belts. Multi-belt drives should be replaced with matched sets.	✓	✓	
EVAPORATOR				
1	Inspect evaporator for any obvious deficiencies.	✓	✓	
2	Inspect plumbing, valves and flanges for leaks and correct as needed.	✓	✓	
COMPRESSOR(S)				
1	Lubricate drive coupling, if applicable.	✓	✓	hermetic compressors no vibrations or unusual noises no leaks found electronic device oil level is 3/4 compressor suction and discharge are all good vibration pads are good L1 L2 L3 controls function properly
2	Lubricate motor bearings (non-hermetic), if applicable.	✓	✓	
3	Check bearrings for vibrations or unuasual noises.	✓	✓	
4	Leak test unit with soap test or electronic device.	✓	✓	
5	Check compressor oil level., if applicable.	✓	✓	
6	Run machine; check action of controls, relays, switches, etc. to see that: a. Compressor(s) run at proper settings. b. Suction and discharge pressures are proper.	✓	✓	
7	Check vibration eliminators. Replace as necessary.	✓	✓	
8	Document AMP draw on compressors	✓	✓	
9	Check safety controls for high pressure cut off.	✓	✓	
CONTROLS				
1	Record chilled water supply and return temps and Humidity .	✓	✓	

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be performed by: HVAC Technician

**Additional Notes:**

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **AIR HANDLER**

SITE AND BLDG #: NY127-01MECHANIC  
SIGNATURE: DATE: 10/7/20LOCATION/RM #: \_\_\_\_\_ WO# 10227 ASSET # 190917-606  
190917-607START TIME: 7amFINISH TIME: 8:30am

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
SPECIAL INSTRUCTIONS				
1	Remove power at Drive or at Breaker Panel. Verify with tester or meter that power has been removed. Install lock out tag out if servicing alone or in confined space for safety precautions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Check fan blades and moving parts for cracks and excessive wear.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	no cracks or excessive wear
2	Check running motor amperatures on all three phases (record in note column) notate L1, L2, and L3 amp draws.-Inspect contactors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	L1 <u>120</u> . L2 <u>120</u> . L3 <u>120</u>
3	Tighten all electrical connectors/lugs to proper torque.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	electrical connectors are tight
4	If unit is a multi-zone air handler, then check each individual zone damper and associated controls.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5	Check bearing collar set screws on fan shaft to make sure they are tight.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	screws are tight
6	Replace filters quarterly, replace as necessary. Check belt, repair or replace as necessary.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	filters are new
7	Check damper actuators and linkage for proper operation. Adjust linkage on dampers if out of alignment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	all function properly
8	Lubricate mechanical bearings and connections sparingly.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	used Lucas heavy duty Grease
9	Clean coils by brushing, blowing, vacuuming	<input checked="" type="checkbox"/>	<input type="checkbox"/>	coils are clean
10	Check coils for leaking, tightness of fittings.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	no leaks fittings are tight
11	Use fin comb to straighten coil fins.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	fin's are straight
12	Report any equipment rust or condensate pan rust -IF found open CM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	no rust found
13	Flush and clean condensate pans and drains, Hose down coils and drain pans and wash with an appropriate EPA approved solution approved solution. Treat condensate pans with an EPA approved biocide.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pan's drains and coils are clean
14	Check belts for wear and cracks, adjust tension or alignment. Replace belts when necessary. Multi-belt drives shall only be replaced with matched sets.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	adjusted belt tension
15	Check rigid couplings for alignment on direct drives, and for tightness of assembly. Check flexible couplings for alignment and wear.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	alignment is good

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
16	Check and test freezestat for proper operation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	freeze stat functions properly
17	Vacuum interior of unit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	interior of unit is clean
18	Check filter doors and access doors for proper gasketing and air leaks. Correct as necessary.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no air leaks
19	Lubricate fan shaft bearings while unit is running. Add grease slowly until slight bleeding is noted from the seals. Do not over lubricate. Remove old or excess lubricant.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	used Lucas heavy duty Grease
20	Clean up work area.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be performed by: HVAC Technician

**Additional Notes:**

## PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

### ENERGY RECOVERY VENTILATOR

SITE AND BLDG #: NY127-01MECHANIC  
SIGNATURE: DATE: 10/7/20LOCATION/RM #: \_\_\_\_\_ WO# 10227 ASSET # 190917-608START TIME: 10amFINISH TIME: 10:30am

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
SPECIAL INSTRUCTIONS				
1	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	✓		
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Check all moving components for proper lubrication. Apply lubrication where required.	✓		
2	Check dampers to ensure they open and close properly.	✓		dampers function properly
3	Check all fan belts for wear, tension, alignment, and dirt accumulation.	✓		adjusted tension on belts
4	Check fan wheels and fasteners for oil and dust accumulation and clean as necessary.	✓		no oil or dust accumulation
5	Check, clean, and/or replace both internal and external filters as necessary.	✓		filters are new

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be performed by: HVAC Technician

**Additional Notes:**

## PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

### OUTDOOR CONDENSING UNIT

SITE AND BLDG #: NY127-01

MECHANIC  
SIGNATURE: 

DATE: 10/7/20

 LOCATION/RM #: \_\_\_\_\_ WO# 10227 ASSET # 190917-612  
 190917-613  
 190917-614

START TIME: 10:30am

FINISH TIME: 11:15am

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
SPECIAL INSTRUCTIONS				
1	Schedule outage of unit with personnel in area the unit serves.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	If disposal of the equipment is required, follow regulations concerning removal of refrigerants and disposal of the unit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Remove debris from air screen and clean underneath unit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no debris
2	Wash coil with coil cleaning solution - Rinse Thoroughly	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	coils are clean
3	Straighten fin tubes with fin comb, as needed.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	fins are straight
4	Check electrical connections for tightness.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	electrical connections are good
5	Check mounting base for tightness.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	mounting base is solid
6	Inspect fans for bent blades, unbalance, excessive noise and vibrations.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no bent blades or excessive noise
7	Inspect all piping for leaks and tighten loose connections.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no loose connections
8	Check wires at condenser electrical fused safety switches for tightness and burned insulation. Repair as necessary.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	wiring is good
9	Check supply air temperature to ensure unit is operating properly. If possible record room temperature.and Humidity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Room temp <u>71</u> Room Humidity <u>47</u> %
10	Inspect unit for overall condition and recommend for replacement or other needed repairs.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no replacement needed
11	Clean up work area.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician

**Additional Notes:**

**PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST**  
**MAKE UP AIR UNIT - HEATING/COOLING**

SITE AND BLDG #: **NY127-01**MECHANIC  
SIGNATURE: DATE: **10/7/20**LOCATION/RM #:                      WO# **10227**    ASSET # **190917-617**START TIME: **11:15am**FINISH TIME: **12pm**

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
SPECIAL INSTRUCTIONS				
1	Schedule shutdown with operating personnel.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Check thermostat settings to ensure the cooling and heating systemis operating correctly.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	thermostat functions properly
2	Tighten all electrical connections and measure voltage and current on motors.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	connections are good voltage is good
3	Check filters and clean or replace as necessary.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	filters are clean
4	Lubricate all moving parts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	used white lithium grease
5	Check and inspect the condensate drain in your central air conditioner, furnace and/or heat pump (when in cooling mode).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	drain is clear
6	Check controls of the system to ensure proper and safe operation. Check the starting cycle of the equipment to assure the system starts, operates, and shuts off properly.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	system functions properly
7	Clean evaporator and condenser air conditioning coils.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	coils are clean
8	Clean and adjust blower components to provide proper system airflow.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	airflow is correct
9	Check all gas (or oil) connections, gas pressure, burner combustion and heat exchanger.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no leaks connections are tight

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician

**Additional Notes:**

## PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

### VARIABLE FREQUENCY DRIVE

SITE AND BLDG #: NY127-01

MECHANIC

SIGNATURE: DATE: 10/7/20LOCATION/RM #: \_\_\_\_\_ WO# 10227 ASSET # 190917-628  
190917-629START TIME: 12pmFINISH TIME: 12:30pm

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
SPECIAL INSTRUCTIONS				
1	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Perform a complete visual inspection and cleaning. Broken or damaged parts are replaced as required. Inspected for ambient temperature, dust, dirt, moisture, evidence of overheating, corrosion, integrity, etc. Capacitors are checked for leakage. Conductors and parts are checked for proper insulation. Drives are cleaned using vacuum or compressed air as required. Filters are cleaned or replaced. Power connections are re-torqued to manufacturer's specifications.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	no broken or damaged Parts that required to be replaced

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be performed by: HVAC Technician

**Additional Notes:**

## PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

### AIR CURTAIN

SITE AND BLDG #: NY127-01MECHANIC  
SIGNATURE: DATE: 10/7/20LOCATION/RM #: \_\_\_\_\_ WO# 10227 ASSET # 190917-655START TIME: 12:30pmFINISH TIME: 1pm

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
SPECIAL INSTRUCTIONS				
1	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	✓		
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Disconnect the power to the unit.	✓		
2	Remove the intake grille by removing all screws around the edges.	✓		
3	Vacuum and wash (if necessary) to remove the buildup of dirt and debris.	✓		no debris
4	If necessary, lubricate the motors.	✓		sealed Motors
5	Reinstall the cover and intake grille.	✓		
6	Verify proper operation of unit. Make and/or recommend any needed repairs.	✓		unit functions properly

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be performed by: General Maintenance Worker

**Additional Notes:**