

**CERTIFICATION OF WORK
PREVENTIVE MAINTENANCE**

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

FACID/Building: VA099 Date of Visit: 11.12.2020

Contractor Personnel on Site:

- | | |
|--------------------------|------------|
| 1. <u>RICHARD WALKER</u> | 3. <u></u> |
| 2. <u></u> | 4. <u></u> |

Work Performed:

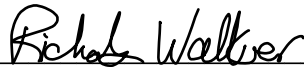
Preventive Maintenance - Services Completed (Annual, Quarterly, Monthly, equipment identification, etc.)

1. WO'S 12953FQ,12985MO,13009QT,13034SA,12954FQ,12986MO,13010QT
2. 13035SA
3. FILTERS, ERU'S,GATE, KITCHEN EQUIP, WATER HEATERS,OUTSIDE LIGHTING
4. AIR HANDLER. MAKE UP AIR UNIT, DEHUMIDIFIER
5. COOLING COIL, CONDENSING UNIT

CERTIFICATION OF WORK

To be signed by the Contractor:

Print Name: Richard Walker Date: 11.12.2020

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: Don Huson Date: 11.12.2020

Signed: 

E-Mail:

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

AIR HANDLER

SITE AND BLDG #: **VA099-01**MECHANIC
SIGNATURE:*Rich Walker*DATE: *11.12.2020*LOCATION/RM #: *Mech Room* WO# **13034** ASSET # **2361**

START TIME:

9am

FINISH TIME:

5pm

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.	✓		
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Check fan blades and moving parts for cracks and excessive wear.	✓		
2	Check running motor amperatures on all three phases (record in note column) notate L1, L2, and L3 amp draws.-Inspect contactors	✓		L1 <u>211.2</u> L2 <u>211</u> L3 <u>219</u>
3	Tighten all electrical connectors/lugs to proper torque.	✓		
4	If unit is a multi-zone air handler, then check each individual zone damper and associated controls.	✓		
5	Check bearing collar set screws on fan shaft to make sure they are tight.	✓		
6	Replace filters quarterly, replace as necessary. Check belt, repair or replace as necessary.	✓		
7	Check damper actuators and linkage for proper operation. Adjust linkage on dampers if out of alignment.	✓		
8	Lubricate mechanical bearings and connections sparingly.	✓		
9	Clean coils by brushing, blowing, vacuuming	✓		
10	Check coils for leaking, tightness of fittings.	✓		
11	Use fin comb to straighten coil fins.	✓		
12	Report any equipment rust or condensate pan rust -IF found open CM	✓		
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.	✓		
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.	✓		
15	Check rigid couplings for alignment on direct drives, and for tightness of assembly. Check flexible couplings for alignment and wear.	✓		

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	✓		
17	Vacuum interior of unit.	✓		
18	Check filter doors and access doors for proper gasketing and air leaks. Correct as necessary.	✓		
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.	✓		
20	Clean up work area.	✓		

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 #: VA099-01

MECHANIC

SIGNATURE: *Richard Walker*

DATE: 11.12.2020

 LOCATION/RM #: *Mech Rm* WO# 13034 ASSET # 2362
 2363

START TIME: 9am

FINISH TIME: 6:30pm

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.	☒	☐	
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.	☒	☐	
3	Check all fan belts for wear, tension, alignment, and dirt accumulation.	☒	☐	
4	Check fan wheels and fasteners for oil and dust accumulation and clean as necessary.	☒	☐	
5	Check, clean, and/or replace both internal and external filters as necessary.	☒	☐	

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To be performed by: HVAC Technician

Additional Notes:

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

MAKE UP AIR UNIT - HEATING/COOLING

SITE AND BLDG #: **VA099-01**

MECHANIC

SIGNATURE: *Rich Walker*DATE: *11.12.2020*LOCATION/RM #: **KITCHEN** WO# **13034** ASSET # **2364**START TIME: *9am*FINISH TIME: *6:30pm*

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.	☒	☐	
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.	☒	☐	
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Check thermostat settings to ensure the cooling and heating systemis operating correctly.	☒	☐	
2	Tighten all electrical connections and measure voltage and current on motors.	☒	☐	
3	Check filters and clean or replace as necessary.	☒	☐	
4	Lubricate all moving parts.	☒	☐	
5	Check and inspect the condensate drain in your central air conditioner, furnace and/or heat pump (when in cooling mode).	☒	☐	
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.	☒	☐	
7	Clean evaporator and condenser air conditioning coils.	☒	☐	
8	Clean and adjust blower components to provide proper system airflow.	☒	☐	
9	Check all gas (or oil) connections, gas pressure, burner combustion and heat exchanger.	☒	☐	

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

AIR COOLED CHILLER, PACKAGE UNIT

SITE AND BLDG #: VA099-01

MECHANIC

SIGNATURE: *Richard Walker*

DATE: 11.12.2020

 LOCATION/RM #: *Behind Bldg 1* WO# 13034 ASSET # 2365

START TIME: 9am

FINISH TIME: 7pm

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.	☒	☐	
2	No intentional venting of refrigerants is permitted. During the servicing, maintenance, and repair of refrigeration equipment, the refrigerant must be recovered.	☒	☐	
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.	☒	☐	
4	Recover, recycle, or reclaim the refrigerant as appropriate.	☒	☐	
5	If disposal of the equipment item is required, follow regulations concerning removal of refrigerants and disposal of the item.	☒	☐	
6	If materials containing refrigerants are discarded, comply with EPA regulations as applicable.	☒	☐	
7	Refrigerant oils to be treated as hazardous waste.	☒	☐	
8	Closely follow all safety procedures described in the Safety Data Sheet (SDS) for the refrigerant and all labels on refrigerant containers.	☒	☐	
9	Remove access covers prior to accomplishing check points.	☒	☐	
TO BE PERFORMED AT EACH INSPECTION SERVICE				
CONDENSER				
1	Remove debris from air screen and clean underneath unit.	☒	☐	
2	Pressure wash coil with proper cleaning solution.	☒	☐	
3	Straighten fin tubes with fin comb.	☒	☐	
4	Check electrical wiring and tighten loose connections. Check fused disconnect switches for condition and operation, contactors	☒	☐	
5	Check mounting for tightness.	☒	☐	
6	Check for corrosion. Clean and treat with inhibitor as needed.	☒	☐	
7	Check fan or blower for bent or damaged blades and 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.	✓		
2	Lubricate motor bearings (non-hermetic), if applicable.	✓		
3	Check bearings for vibrations or unusual 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	✓		L1 6-7 L2 6 L3 6
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 DEHUMIDIFIER

SITE AND BLDG #: **VA099-01**MECHANIC
SIGNATURE: *Richard Walker*DATE: *11.12.2020*LOCATION/RM #: **In Vault??** WO# **13034** ASSET # **2370**START TIME: *9am*FINISH TIME: *6:50pm*

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 water inlet and outlet for any leaks, repair as needed.	✓		
2	Clean and/or replace filter as needed. -Record space humidity	✓		Space Humidity <u>42</u> %
3	If applicable, check hours per usage, replace tanks's as needed.	✓		

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:

yes, in vault