

**CERTIFICATION OF WORK  
PREVENTIVE MAINTENANCE**

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

FACID/Building: \_\_\_\_\_ Date of Visit: \_\_\_\_\_

Contractor Personnel on Site:

- |          |          |
|----------|----------|
| 1. _____ | 3. _____ |
| 2. _____ | 4. _____ |

**Work Performed:**

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

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

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**CERTIFICATION OF WORK**

To be signed by the Contractor:

Print Name: \_\_\_\_\_ Date: \_\_\_\_\_

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: \_\_\_\_\_ Date: \_\_\_\_\_

Signed: John S. Sanet

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

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

SITE AND BLDG #: **NY126**MECHANIC  
SIGNATURE: DATE: **5/28/19**

LOCATION/RM #:

WO# **8762**ASSET # **3118/3137**START TIME: **9:45am**FINISH TIME: **11am****3143/3164**

| CHECK POINT                                | CHECKPOINT DESCRIPTION  | TASK COMPLETE                       |                                     | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|--|---|-------------------------------------|-------------------------------------|---|
|  |   | YES                                 | NO                                  |   |
| SPECIAL INSTRUCTIONS                       |   |                                     |                                     |   |
| 1  | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |   |
| 2  | 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 checked="" 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 checked="" type="checkbox"/> | no cracks or excessive where noted                                      |
| 2  | Check running motor amperatures on all three phases (record in note column) notate L1, L2, and L3 amp draws.  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | L1 120 L2 120 L3 120  |
| 3  | Tighten all electrical connectors/lugs to proper torque.  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | all electrical connections 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 checked="" type="checkbox"/> | all controls function properly  |
| 5  | Check bearing collar set screws on fan shaft to make sure they are tight.   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | set screws are tight  |
| 6  | Check filters for dirt accumulations, replace as necessary. Check belt, repair or replace as necessary.   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | filters were replaced   |
| 7  | Check damper actuators and linkage for proper operation. Adjust linkage on dampers if out of alignment.   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | dampers and actuators operate correctly                                 |
| 8  | Lubricate mechanical bearings and connections sparingly.  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | mechanical bearings are lubricated                                      |
| 9  | Clean coils by brushing, blowing, vacuuming, or pressure washing.   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | coils are clean   |
| 10   | Check coils for leaking, tightness of fittings.   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | no leaks all fittings are tight   |
| 11   | Use fin comb to straighten coil fins.   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | fins are straight   |
| 12   | If applicable, clean strainer (annually).   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | no strainer   |
| 13   | Flush and clean condensate pans and drains, remove all rust prepare metal and paint. 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 checked="" type="checkbox"/> | condensate pans are in good condition                                   |

| CHECK POINT | CHECKPOINT DESCRIPTION  | TASK COMPLETE                       |                          | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|-------------|---|-------------------------------------|--------------------------|---|
|             |   | YES                                 | NO                       |   |
| 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"/> | belts are in good condition and are tight                               |
| 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"/> | belt driven   |
| 16          | Check and test freezestat for proper operation  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | freezestat operates correctly   |
| 17          | Vacuum interior of unit.  | <input checked="" type="checkbox"/> | <input 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 type="checkbox"/> | filter doors and gaskets are good                                       |
| 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 type="checkbox"/> | bearings were dry on fan shaft used Lucas heavy duty Grease             |
| 20          | Clean up work area.   | <input checked="" type="checkbox"/> | <input 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** **AIR COOLED CHILLER, PACKAGE UNIT**

**SITE AND BLDG #:** NY126

**MECHANIC  
SIGNATURE:** 

**DATE:** 5/28/19

**LOCATION/RM #:**                      **WO#** 8762                      **ASSET #** 3221

**START TIME:** 11am

**FINISH TIME:** 1:30pm

| CHECK POINT                                       | CHECKPOINT DESCRIPTION   | TASK COMPLETE                       |                                     | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|---|--|-------------------------------------|-------------------------------------|---|
|   |  | YES                                 | NO                                  |   |
| <b>SPECIAL INSTRUCTIONS</b>                       |  |                                     |                                     |   |
| 1   | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to. | <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   | Comply with the latest provisions of the Clean Air Act and Environmental Protection Agency (EPA) regulations as they apply to protection of stratospheric ozone.                 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |   |
| 4   | 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"/> |   |
| 5   | 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"/> |   |
| 6   | Recover, recycle, or reclaim the refrigerant as appropriate.   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |   |
| 7   | 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"/> |   |
| 8   | If materials containing refrigerants are discarded, comply with EPA regulations as applicable.   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |   |
| 9   | Refrigerant oils to be treated as hazardous waste.   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |   |
| 10  | 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"/> |   |
| 11  | 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"/> |   |
| 2   | Pressure wash coil with proper cleaning solution.  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |   |
| 3   | Straighten fin tubes with fin comb.  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | fin tubes are straight  |

| CHECK POINT   | CHECKPOINT DESCRIPTION   | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|---------------|--|---------------|----|---|
|               |  | YES           | NO |   |
| 4             | Check electrical wiring and tighten loose connections. Check fused disconnect switches for condition and operation.  | ✓             | ✓  | all are in good shape and operate correctly                             |
| 5             | Check mounting for tightness.  | ✓             | ✓  | mounting is tight   |
| 6             | Check for corrosion. Clean and treat with inhibitor as needed.   | ✓             | ✓  | no corrosion  |
| 7             | Check fan or blower for bent or damaged blades and imbalance.  | ✓             | ✓  | no bent or damage blade's   |
| 8             | Lubricate shaft and motor bearings on fans and remove old or excess lubricant, if applicable.  |               | ✓  | hermetic compressor found   |
| 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. |               | ✓  | no pulleys belts or couplings   |
| EVAPORATOR    |  |               |    |   |
| 1             | Inspect evaporator for any obvious deficiencies.   | ✓             | ✓  | no obvious deficiencies found   |
| 2             | Inspect plumbing, valves and flanges for leaks and correct as needed.  | ✓             | ✓  | no leaks found at this time   |
| COMPRESSOR(S) |  |               |    |   |
| 1             | Lubricate drive coupling, if applicable.   |               | ✓  | no Drive coupling   |
| 2             | Lubricate motor bearings (non-hermetic), if applicable.  |               | ✓  | hermetic compressor   |
| 3             | Check bearings for vibrations or unusual noises.   |               | ✓  |   |
| 4             | Leak test unit with soap test or electronic device.  | ✓             | ✓  | no leaks found at this time   |
| 5             | Check compressor oil level., if applicable.  |               | ✓  | hermetic compressor   |
| 6             | Run machine; check action of controls, relays, switches, etc. to see that:<br>a. Compressor(s) run at proper settings.<br>b. Suction and discharge pressures are proper.     |               | ✓  |   |
| 7             | Check vibration eliminators. Replace as necessary.   | ✓             | ✓  | vibration eliminators are good  |
| 8             | Check safety controls for high pressure cut off.   |               | ✓  |   |
| CONTROLS      |  |               |    |   |
| 1             | Confirm chiller is operating through building automation.  |               | ✓  | Chiller is not operational at this time                                 |

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:** flow switch needs to be replaced and is being done on Thursday 5/30/19 I'm going to set up a time next month to go through the unit again