**This Prefunctional Checklist should be completed as part of startup and initial checkout of the equipment in preparation for Functional Performance testing.**

|  |  |
| --- | --- |
| PC: | **23 34 23** |
| **ITEM:** | **HVAC Power Ventilators** |
| **ID:** |  |
| **AREA SERVED:** |  |

Form Filled Out By:

|  |  |  |
| --- | --- | --- |
|  | Name & Company | Date |
| GC |  |  |
| MC |  |  |
| EC |  |  |
| BC |  |  |
| CC |  |  |
| OR |  |  |
| A/E |  |  |
| CA |  |  |

GC = General Contractor; MC = Mechanical Contractor; EC = Electrical Contractor; RMCS = Refrigerant Management Control System Contractor, OR = Owner Representative; A/E = Architect/Engineer; CA = Commissioning Agent

XX = No Initials Required

# DOCUMENTATION VERIFICATION

Check if OK. Enter note number if deficient.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item** | **GC** | **MC** | **EC** | **RMCS** | **OR** | **A/E** | **CA** |
| Product information submitted |  |  |  |  |  |  |  |
| Shop drawings submitted |  |  |  |  |  |  |  |
| Manufacturer’s installation instructions submitted |  |  |  |  |  |  |  |

# MODEL VERIFICATION

Fill in requested information.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Specified | **Submitted**  | **Installed** |
| Manufacturer |  |  |  |
| Model Number |  |  |  |
| Mark No |  |  |  |
| Design CFM |  |  |  |
| Fan RPM |  |  |  |
| Motor Data – HP |  |  |  |
| Motor Data – Volts |  |  |  |
| Motor Data - FLA |  |  |  |

# INSTALLATION VERIFICATION

This checklist does not take the place of the manufacturer’s recommended checkout and startup procedures or report**.**

Check if OK. Enter Outstanding Item Note number if deficient.

| **No** | **Checks** | **GC** | **MC** | **EC** | **RMCS** | **OR** | **A/E** | **CA** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Fan’s casing is in good condition: no dents, scratches, etc |  |  |  |  |  |  |  |
| 2 | Fan unit must be set level. Shimming may be necessary. |  |  |  |  |  |  |  |
| 3 | Maintenance access acceptable for unit and components. adequate access is present for routine maintenance ( motor, fan and belt replacement) |  |  |  |  |  |  |  |
| 4 | Verify the Wall opening size and propeller-to-damper distances are correct based on the fan size and installation method.  |  |  |  |  |  |  |  |
| 5 | Unit is properly supported. Install support braces to the end of units with rods, cables, angle, etc. Vertical braces must carry a minimum load of 500 pounds per support, angled (45degree) braces 750 pounds per support based on two supports |  |  |  |  |  |  |  |
| 6 | Fan rotates freely by hand. No contact with fan’s housing |  |  |  |  |  |  |  |
| 7 | Verify fan and motor pulleys are properly aligned. |  |  |  |  |  |  |  |
| 8 | Fan Belt has the proper tension. (Proper belt deflection halfway between pulley centers is 1/64" for each inch of belt span. ) |  |  |  |  |  |  |  |
| 9 | All sheave setscrews are securely tightened. (Wheel hub and motor pulley). |  |  |  |  |  |  |  |
| 10 | Power disconnect in place and accessible. Disconnect is located within visual proximity to turn off electrical service. |  |  |  |  |  |  |  |
| 11 | Verify fan motor is securely grounded |  |  |  |  |  |  |  |
| 12 | Prior to final electrical connection - Verify the fans motor amperage and voltage ratings are compatible to the supply power source voltage. |  |  |  |  |  |  |  |
| 13 | Make sure supply wiring to the fan is properly fused. |  |  |  |  |  |  |  |
| 14 | Before start up, make sure the fan is clear of personnel and loose objects. |  |  |  |  |  |  |  |
| 15 | Briefly energize the fan to verify the fan’s rotation is correct. If VFD is equipped with a bypass mode be sure to check fan rotation in bypass mode too. |  |  |  |  |  |  |  |
| 16 | Record full load running amps for the fan. \_\_\_\_\_\_\_\_\_rated FL amps x \_\_\_\_\_\_\_\_\_srvc factor = \_\_\_\_\_\_\_\_\_\_\_ (Max amps). Running less than max? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |  |  |  |  |  |
| 17 | Measure and record the voltage: \_\_\_\_\_\_\_\_\_ Verify the supply voltage does not vary more than 10% of that listed on the unit’s data plate. |  |  |  |  |  |  |  |
| 18 | No unusual noise or vibration while unit is in operation. |  |  |  |  |  |  |  |
| 19 | Check belt tension tension, fasteners and setscrews tightness after unit has operated for 24 hours. |  |  |  |  |  |  |  |

# OUTSTANDING ITEMS

Note outstanding items in table below. Use numbers referenced above.

|  |  |  |
| --- | --- | --- |
| Resolved(Initial / Date) | **Note** | Description |
|  | **1.** |  |
|  | **2.** |  |
|  | **3.** |  |
|  | **4.** |  |
|  | **5.** |  |
|  | **6.** |  |
|  | **7.** |  |
|  | **8.** |  |
|  | **9.** |  |
|  | **10.** |  |

# FIELD NOTES

Fill in as appropriate.

|  |
| --- |
|  |
|  |
|  |
|  |
|  |

# SIGN OFF

System / Equipment have been installed in accordance with the Contract Documents and is ready for Functional Testing.

|  |  |  |
| --- | --- | --- |
|  | **Signature** | **Date** |
| **Contractor’s Representative** |  |  |
| **A /E Representative** |  |  |
| **Commissioning Agent** |  |  |
| **Owner’s Representative** |  |  |

##### END OF CHECKLIST