

System Verification Checklist

(Project)

System: **Air Handling Unit**

Tag:

Service:

Installation Check	Specified	Provided	Initials	Date	IC
Supply Fan (SF)					
Identification Tag Installed	Reference				MC
Fan Vibration Isolation	Reference				MC
Motor Vibration Isolation	Reference				MC
Flexible Connection	Reference				MC
Sheave Alignment	Reference				MC
Belt Tension	Reference				MC
Lubrication	Reference				MC
Section Cleaned/Vacuumed	Reference				MC
Service Access	Reference				MC
Cooling Coil (CC)					
Isolation Valves	Reference				MC
2-Way Control Valve (N/C)	Reference				MC
Automatic Flow Controls (#)	XX GPM				MC
P/T Test Ports	Reference				MC
Manual Air Vent	Reference				MC
Strainer / Blow-Down	Reference				MC
Thermometer (EWT)	Reference				MC
Thermometer (LWT)	Reference				MC
Coil Drain	Reference				MC
Condensate Drain	Reference				MC
Section Cleaned/Vacuumed	Reference				MC
Service Access	Reference				MC
Heating Coil (HC)					
Isolation Valves	Reference				MC
3-Way Control Valve (N/O)	Reference				MC
Automatic Flow Control (#)	XX GPM				MC
P/T Test Ports	Reference				MC
Manual Air Vent	Reference				MC
Strainer / Blow-Down	Reference				MC

Remarks:

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Installation Check	Specified	Provided	Initials	Date	IC
Heating Coil (HC) (Continued)					
Section Cleaned/Vacuumed	Reference				MC
Service Access	Reference				MC
External Face / Bypass Damper					
Damper Installed	Reference				MC
Section Cleaned/Vacuumed	Reference				MC
Service Access	Reference				MC
Filters					
30% Pre Filters	Reference				MC
85% Final Filters	Reference				MC
Magnahelic Gauge					
Section Cleaned/Vacuumed	Reference				MC
Service Access	Reference				MC
Airflow Monitoring Stations					
SAF AFMS	Reference				MC
RAF AFMS	Reference				MC
Traq OA AFMS	Reference				MC
Return Fan (RF)					
Identification Tag Installed	Reference				MC
Fan Vibration Isolation	Reference				MC
Motor Vibration Isolation	Reference				MC
Flexible Connection	Reference				MC
Sheave Alignment	Reference				MC
Belt Tension	Reference				MC
Lubrication	Reference				MC
Section Cleaned/Vacuumed	Reference				MC
Service Access	Reference				MC

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Installation Check	Specified	Provided	Initials	Date	IC
Return / Relief Dampers					
Motorized Return Damper	Reference				MC
Motorized Relief Damper	Reference				MC
Service Access	Reference				MC
Electrical					
SA Duct Smoke Detector	Reference				EC
RA Duct Smoke Detector	Reference				EC
SF VFD Wired	Reference				EC
RF VFD Wired	Reference				EC
SF Motor Wired	Reference				EC
RF Motor Wired	Reference				EC
Service Lights Functional	Reference				EC
Controls					
SF VFD Installed	Reference				CC
RF VFD Installed	Reference				CC
SF VFD Overloads Installed	Reference				CC
RF VFD Overloads Installed	Reference				CC
Low Temperature Limit (38°F)	Reference				CC
Discharge Static Limit (3.0")	Reference				CC
Supply Static Pressure (1.5")	Reference				CC
SF AFMS Wired	Reference				CC
RF AFMS Wired	Reference				CC
Traq OA AFMS Wired	Reference				CC
Traq OA Damper Wired	Reference				CC
Return Air Damper Wired	Reference				CC
Relief Air Damper Wired	Reference				CC
CC Control Valve Wired	Reference				CC
HC Control Valve Wired	Reference				CC
DDC Programmed (Specific)	Reference				CC

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System Verification Checklist

(Project)

System: **VAV**

Tag:

Service:

Installation Check	Specified	Provided	Initials	Date	IC
VAV					
Identification Tag Installed	Reference				MC
Clean and Free of Debris	Reference				MC
Access Door Installed	Reference				MC
Component Access	Reference				MC
Inlet Size	X				MC
Grilles Installed (#)	X				SM
Manual Volume Dampers (#)	X				SM
Reheat Coil					
Isolation Valves	Reference				MC
Control Valve	Reference				MC
Automatic Flow Control	XX GPM				MC
P/T Test Ports	Reference				MC
Manual Air Vent	Reference				MC
Strainer / Blow-Down	Reference				MC
Coil Drain	Reference				MC
Service Access	Reference				MC
Controls					
Control Power (24 Volts)	Reference				TCC
HW Control Valve Wired	Reference				TCC
T-Stat Installed	Reference				TCC
DDC Addressed	Reference				TCC
DDC Programmed (Basic/Default)	Reference				TCC
DDC Setpoints (Specific)	Reference				TCC

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System Verification Checklist

(Project)

System: **Exhaust Fan**

Tag:

Service:

Installation Check	Specified	Provided	Initials	Date	IC
Exhaust Fan					
Identification Tag Installed	Reference				MC
Cleaned/Vacuumed	Reference				MC
Motorized BDD Installed	No	-----	-----	-----	-----
Gravity BDD Installed	Reference				MC
BDD Unobstructed	Reference				MC
Sheaves Alignment	Reference				MC
Belt Tension	Reference				MC
Lubrication	Reference				MC
Service Access	Reference				MC
Volume Control					
Rheostat	No	-----	-----	-----	-----
Adjustable Motor Sheave	Reference				MC
Electrical					
Motor Wired	Reference				EC
Starter	No	-----	-----	-----	-----
Overloads	No	-----	-----	-----	-----
Thermally Protected Motor	Reference				MC
Thermally Protected Motor	Reference				MC
Controls					
Occupied / Unoccupied	Reference				CC
Thermostat Operation	Reference				CC
Two Speed Operation	No	-----	-----	-----	-----

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System Verification Checklist

(Project)

System: **Hydronic Pump**

Tag:

Service:

Installation Check	Specified	Provided	Initials	Date	IC
Pump					
Spring Pipe Isolation (Suction)	Reference				MC
Spring Pipe Isolation (Discharge)	Reference				MC
Pressure Gauge (Suction Flange)	Reference				MC
Pressure Gauge (Discharge Flange)	Reference				MC
Isolation Valve (Suction)	Reference				MC
Isolation Valve (Discharge)	Reference				MC
Triple Duty Valve	Reference				MC
Strainer	Reference				MC
Flexible Connection (Suction)	Reference				MC
Flexible Connection (Discharge)	Reference				MC
Start-Up Strainer	Reference				MC
Suction Diffuser / Blow-Down	Reference				MC
Thermometer (Suction)	Reference				MC
Thermometer (Discharge)	Reference				MC
Motor Alignment	Reference				MC
Base Pad Isolation	Reference				MC
Electrical					
VFD Wired	Reference				EC
Overloads Installed	Reference				EC
Motor Wired	Reference				EC
Controls					
VFD Installed	Reference				CC
VFD Overloads Installed	Reference				CC
System Pressure Sensor Installed	Reference				CC
DDC Programmed (Specific)	Reference				CC

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System Verification Checklist

(Project)

System: **Hydronic Accessories**

Tag:

Service:

Installation Check	Specified	Provided	Initials	Date	IC
Air Separator					
Domestic Make-Up Water	Reference				MC
Reducing Valve w/ Check Valve	Reference				MC
Air Vent (High Capacity Float)	Reference				MC
Inlet Connection From System	Reference				MC
Outlet to Pump Inlet	Reference				MC
Expansion Tank					
Pre-Charge Connection	Reference				MC
Relief Plug	Reference				MC
Factory Pressurized	Reference				MC
Automatic Air Vent	Reference				MC
Pressure Gauge	Reference				MC
Isolation Valve	Reference				MC
Drain Valve	Reference				MC
Water Storage Tank					
Install per manufacturer's instructions	Reference				MC
Installed on 4" concrete pads	Reference				MC
10 gallon expansion tank installed on WST outlet	Reference				MC
Unions installed	Reference				MC
T&P relief valves installed	Reference				MC
Non-user adjustable temperature sensors installed	Reference				MC
Provide pipe transition at inlet of storage tanks	Reference				MC
Operational Checks					
Perform before operating system	Reference				MC
Open manual valves fully	Reference				MC
Set PRV for required pressure	Reference				MC
Inspect air vents at high points and determine if all are operating freely	Reference				MC
Set temperature controls so coils are calling for full flow	Reference				MC
Inspect & set operating temperature of hydronic equipment	Reference				MC

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System Verification Checklist

(Project)

System: **Lighting Controls**

Serving: **Dining and Kitchen**

<i>Installation Check</i>	<i>Specified</i>	<i>Provided</i>	<i>Initials</i>	<i>Date</i>	<i>IC</i>
Zone 1 Dining Area B 112					
() fixtures installed/wired					
() ballasts wired to HM3-13					
(1) single pole switch installed/wired					
(1) single pole switch outside Rm. 129					
Zone 2 West Entry Alcove					
() fixtures installed/wired					
() ballast wired to					
Photocell installed/wired					
Photocell located per design					
Zone 3 Dish Washing 109					
() fixtures installed/wired					
() ballast wired to					
(1) single pole switch installed/wired					
(1) single pole switch at Rm. 109					
Zone 4 East Entry Alcove					
() fixtures installed/wired					
() ballast wired to					
Photocell installed/wired					
Photocell located per design					
Zone 5 Dining Area E 107					
() fixtures installed/wired					
() ballasts wired to HM3-17					
(1) single pole switch installed/wired					
(1) single pole switch outside Rm. 129					
Zone 6 Tray Return Area					
() fixtures installed/wired					
() ballasts wired to HM3-15					
(1) single pole switch installed/wired					
(1) single pole switch outside Rm. 129					

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System Verification Checklist

(Project)

System: **Domestic Hot Water**

Serving: **Dining and Kitchen**

<i>Installation Check</i>	<i>Specified</i>	<i>Provided</i>	<i>Initials</i>	<i>Date</i>	<i>IC</i>
Men 128 Sink #1					
Hot water pipe connected per design					
Operator valve installed					
Isolation valve installed					
Valves are accessible for service					
Installed per KY Building Code					
Penetrations patched and sealed					
Penetrations fire stopped as required					
Penetrations sleeved (and/or flashed)					
Penetration patch finished to match					
Dissimilar metal connections installed with dielectric unions					
Pipes secured to building structure					
Piping is concealed where required					
Piping avoids electrical installations					
Piping is insulated as required					
Piping is labeled as required					
Men 128 Sink #2					
Hot water pipe connected per design					
Operator valve installed					
Isolation valve installed					
Valves are accessible for service					
Installed per KY Building Code					
Penetrations patched and sealed					
Penetrations fire stopped as required					
Penetrations sleeved (and/or flashed)					
Penetration patch finished to match					
Dissimilar metal connections installed with dielectric unions					
Pipes secured to building structure					
Piping is concealed where required					
Piping avoids electrical installations					
Piping is insulated as required					
Piping is labeled as required					

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System Verification Checklist

[Project]

System: **ASTM E779 Air Barrier Leakage Test Preparation**

Service: **Building Name/Number**

Contractor:	
Floor:	
Items to be provided by Contractor to FCG prior to Air Barrier Testing.	Date/I
Obtain copies of drawings of site plans (with sea level elevations), floor plans, building elevations and wall sections with dimensions and Building Numbers and addresses at least a week prior to the testing date.	
Obtain a copy of the Design-Build RFP or Air Barrier Specification for the project Air Barrier Testing requirements.	
Provide contact names, cell phone numbers and e-mail addresses for each building.	
FCG perform Pre-Test observation walk-through of Air Barrier surfaces.	
FCG to confirm if two-way communication will be required	
Items to be completed by FCG with Contractor support prior to Air Barrier Testing.	Date/I
Wear Personal Protective and Safety Equipment (PPE); Eyewear, Footwear, Hearing Protection, Safety Vest, and adhere to project safety requirements.	
Install Air Barrier Testing Door Signs on the appropriate doors.	
Confirm HVAC grilles, supply & return air registers have been covered and sealed.	
Confirm acoustical ceiling tile panels have been installed.	
Confirm open face junction boxes have covers or have been taped.	
Confirm voids and penetrations have been sealed and/or fire-stopped per specifications.	
Confirm HVAC, exhaust, supply or return fans are turned off during testing.	
Confirm the interior doors of conditioned rooms are propped open.	
Confirm the closets and other non-conditioned room doors are closed.	
Confirm windows are closed and locked.	
Confirm door sweeps installed and adjusted as required by specifications.	
Identify door blower installation locations for 1, 2 or 3 point testing.	
Items to be completed after the Air Barrier Testing.	Date/I
Remove Air Barrier Testing Door Signs from the doors.	
Confirm HVAC grilles, supply & return air registers have been uncovered.	
Confirm HVAC, exhaust, supply or return fans are placed in normal operation.	
Prepare and submit Air Barrier Test Report.	

Remarks: Date/I = Date/Initial

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