

System Verification Checklist

[Project Name]

System: **Air Handling Unit**
Location:

Tag: **AHU-__**

Service: **Outside Air**
Building:

<i>Installation Check/Reference</i>	<i>Provided</i>	<i>Initials</i>	<i>Date</i>	<i>IC</i>
Manufacturer:				MC
Model Number:				MC
Unit Identification/Installation				
Equipment and Piping Identification Affixed, Specification 230553				MC
Comply with Equipment Manufacturer's Written Installation Instructions				MC
Extra Materials				
(3) Sets of Filters, Spec. 237200-1.8.A				MC
(1) Set of Fan Belts, Spec. 237200-1.8.A				MC
Unit Mounting				
Concrete Equipment Pad (4"), M-402/Note 11, M-502/Detail 3E, Spec. 237200-3.2.A				MC
Access				
Access Doors Provided As Specified, Spec. 237300-2.3				MC
Unit Access Provided for Maintenance and Repair, Spec. 230500-3.5, 237200-3.2.C				MC
Chilled Water Coil Piping				
Unions Installed, M-501/Detail 5B				MC
P/T Plugs Installed, M-501/Detail 5B				MC
Temperature Control Valve Installed, M-501/Detail 5B, M-702/Detail 1A, Spec. 230900.99-3.2.I				MC
Shutoff (Isolation) Valves Installed, M-501/Detail 5B				MC
Strainer with Blowdown Valve On Inlet, M-501/Detail 5B				MC
Manual Balancing Valves Installed, M-501/Detail 5B				MC
Drain With Hose End/Cap and Drain Valve, M-501/Detail 5B				MC
Thermometers Installed, M-501/Detail 5B				MC
Pressure Gauge Installed with Ball Valves, M-501/Detail 5B				MC

Remarks: IC-Installing Contractor; SM-Sheet Metal Contractor; MC-Mechanical Contractor; EC-Electrical Contractor; CC-Controls Contractor

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Chilled Water Coil Piping (continued)				
Grommets Installed at Pipe Penetrations, M-501/Detail 5B				MC
Manual Air Vent Installed, M-501/Details 5B, 2A				MC
Heating Coil Piping				
Unions Installed, M-501/Detail 5B				MC
P/T Plugs Installed, M-501/Detail 5B				MC
Temperature Control Valve Installed, M-501/Detail 5B, M-702/Detail 1A, Spec. 230900.99-3.2.1				MC
Shutoff (Isolation) Valves Installed, M-501/Detail 5B				MC
Strainer with Blowdown Valve On Inlet, M-501/Detail 5B				MC
Manual Balancing Valves Installed, M-501/Detail 5B				MC
Drain With Hose End/Cap and Drain Valve, M-501/Detail 5B				MC
Thermometers Installed, M-501/Detail 5B				MC
Pressure Gauge Installed with Ball Valves, M-501/Detail 5B				MC
Grommets Installed at Pipe Penetrations, M-501/Detail 5B				MC
Manual Air Vent Installed, M-501/Details 5B, 2A				MC
Preheat Coil Piping				
Unions Installed, M-501/Detail 5B				MC
P/T Plugs Installed, M-501/Detail 5B				MC
Temperature Control Valve Installed, M-501/Detail 5B, M-702/Detail 1A, Spec. 230900.99-3.2.1				MC
Shutoff (Isolation) Valves Installed, M-501/Detail 5B				MC
Strainer with Blowdown Valve On Inlet, M-501/Detail 5B				MC
Manual Balancing Valves Installed, M-501/Detail 5B				MC

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Preheat Coil Piping (continued)				
Drain With Hose End/Cap and Drain Valve, M-501/Detail 5B				MC
Thermometers Installed, M-501/Detail 5B				MC
Pressure Gauge Installed with Ball Valves, M-501/Detail 5B				MC
Grommets Installed at Pipe Penetrations, M-501/Detail 5B				MC
Manual Air Vent Installed, M-501/Details 5B, 2A				MC
Pre-Heating Pump HWP-AHU-1				
Mfr./Model #:				MC
Equipment and Piping Identification Affixed, Specification 230553				MC
Comply with Equipment Manufacturer's Written Installation Instructions				MC
Install Pump with Motor and Pump Shafts Vertical, Spec. 232123-3.3.E				MC
Spring Vibration Isolation Hangers Installed, M-501/Detail 1C, Spec. 232123-3.3.E				MC
Unions Installed, M-501/Detail 1C				MC
Pressure Gauge w/ Shutoff Cocks Installed, M-501/Detail 1C				MC
Isolation Valves Installed, M-501/Detail 1C				MC
Strainer with Blowdown Valve Installed, M-501/Detail 1C				MC
Check Valve Installed, M-501/Detail 1C				MC
Condensate Drain Pan				
Drain Pan and Piping, Spec. 237200-2.3, 2.6.D, 3.3, M-501/Detail 3A				MC
Filter(s) Section				
Spec. 237200-2.8				MC
EA Filters Installed – MERV 8 Rating, M-503, Spec. 237200-2.8				MC
Pre-Filters Installed – MERV 8 Rating, Spec. 237200-2.8				MC

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Filter(s) Section (continued)				
Final Filters Installed – MERV 14 Rating, Spec. 237200-2.8				MC
Differential Pressure Filter Switches, M702/Detail 1A, Spec. 230900.99-2.9.1.3				MC
Supply Fan				
Spec. 237200-2.4				MC
Perforated Liner Provided, M-601				MC
Return Fan				
Spec. 23731200-2.4				MC
Perforated Liner Provided, M-601				MC
Enthalpy Heat Wheel ERU-1E/ERU-1S				
Spec. 237200-2.10, M-702/Detail 1A				MC
Sensible Heat Wheel SW-1E/SW-1S				
Spec. 237200-2.11, M-702/Detail 1A				MC
Dampers/Ductwork				
OA Motorized Damper (OAD-D) and Actuator(s), M-702/Detail 1A, Spec. 230900.99-2.10, 3.1.C				TCC SM
EA Motorized Damper (EXA-D) Provided by Manufacturer and Actuator(s), M-702/Detail 1A, Spec. 230900.99-2.10, 3.1.C				TCC SM
Ductwork Provided with Support From Structure As Specified, Spec. 233113				SM
Final Duct Connections With Flexible Connections, Spec. 233300				SM
Duct Silencer RA1-1 Installed, M-601				SM
Duct Silencer SA1-1 Installed, M-601				SM
Electrical				
Furnish and install all disconnect switches, NEC circuit protection, motor controllers, relays, devices, components as required for unit to provide complete and operable electrical system				EC
Supply Fan Motor Starter (MS-D6) Wired to Panel 34D1/Circuits 1,3,5, EP1E3, E-603, Spec. 262913-3.2, 3.3				EC

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Electrical (continued)				
Return Fan Motor Starter (MS-D7) Wired to Panel 34D1/Circuits 7,9,11, EP1E3, E-603, Spec. 262913-3.2, 3.3				EC
HWP-AHU-1 Motor Starter (MS-D13) Wired to Panel 34D1/Circuits 14,16,18, EP1E3, E-603, Spec. 262913-3.2, 3.3				EC
Energy Recovery Wheel Motor Starter (MS-D8) Wired to Panel 34D1/Circuits 13,15,17, EP1E3, E-603, Spec. 262913-3.2, 3.3				EC
Unit Lights Provided, Spec. 237200-2.12				EC
15A, 115V GFCI Receptacle(s) Provided for Unit, Spec. 237200-2.12				EC
Junction Box for Lighting and Receptacles Connected to Panel 32D1/Circuit 11, EP1E3/Note 29				EC
Grounding For Components and Unit, Spec. 260526				EC
Controls				
HVAC DDC Controller, Spec. 230900.99-3.1.C				CC
Low Limit Freezestat; Hardwired to Unit Fan(s), M-702/Detail 1A, Spec. 230900.99-2.9.E, 3.2.H.12				CC
Supply Air Duct Smoke Detector (SA-SD) Hard Wired to Unit Fan(s), M-702/Detail 1A				CC
Return Air Duct Smoke Detector (RA-SD) Hard Wired to Unit Fan(s), M-702/Detail 1A				CC
Sensors				
Pre-Heat Coil Discharge Temperature Sensor, M702/Detail 1A, Spec. 230900.99-3.2.H.10				CC
Cooling Coil Discharge Temperature Sensor, M702/Detail 1A, Spec. 230900.99-3.2.H.10				CC
Relief Exhaust Temperature Sensor (RXH EA-T), M702/Detail 1A, Spec. 230900.99-3.2.H.10				CC
Enthalpy Wheel Discharge Temperature Sensor (EWDA-T), M702/Detail 1A, Spec. 230900.99-3.2.H.10				CC

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Sensors (continued)				
Exhaust Discharge Temperature Sensor (EXH DA-T), M-702/Detail 1A, Spec. 230900.99-3.2.H.10				CC
Supply Air Temperature Sensor (SADA-T), M-702/Detail 1A, Spec. 230900.99-3.2.H.10				CC
Return Air Temperature Sensor (RA-T), M-702/Detail 1A, Spec. 230900.99-3.2.H.10				CC
Outside Air Global Temperature Sensor (OA-T), M-702/Detail 1A, Spec. 230900.99-3.2.H.10				CC
Outside Air Temperature Sensor (OA-T), M-702/Detail 1A, Spec. 230900.99-3.2.H.10				CC
Supply Air Humidity Sensor (SA-H), M-702/Detail 1A, Spec. 230900.99-2.9.C				CC
Return Air Humidity Sensor (RA-H), M-702/Detail 1A, Spec. 230900.99-2.9.C				CC
Sensible Heat Wheel Temperature Sensor (SHW DAT), M-702/Detail 1A, Spec. 230900.99-3.2.H.10				CC
Variable Frequency Drives				
Exhaust Air Fan VFD Installed, M-702/Detail 1A, Spec. 237200-2.12, 230900.99-2.11.A, 262923-3.4				MC
Outside Air Fan VFD Installed, M-702/Detail 1A, Spec. 237200-2.12, 230900.99-2.11.A, 262923-3.4				MC
Supply Air Fan VFD Installed, M-702/Detail 1A, Spec. 237200-2.12, 230900.99-2.11.A, 262923-3.4				MC
Enthalpy Heat Wheel VFD Installed, M-702/Detail 1A, Spec. 237200-2.12, 230900.99-2.11.A, 262923-3.4				MC
Sensible Heat Wheel VFD Installed, M-702/Detail 1A, Spec. 237200-2.12, 230900.99-2.11.A, 262923-3.4				MC

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