

## Functional Performance Test

**(Project)**

**System:** Air Handling Unit

**Tag:**

**Service:**

<i>Functional Performance Test</i>	<i>P</i>	<i>F</i>	<i>Remarks</i>
<b>Stop AHU Through Controls</b>			
Supply Fan Stop			
Return Fan Stop			
OA Damper Close			
RA Damper Open			
Relief Air Damper Close			
DDC Alarm			
CW Valve Close			
Humidifier Off			
Heating Valve in Control (Confirm N/O)			
Drive OA Dampers Open/Closed			
Drive RA Dampers Open/Closed			
Drive Relief Air Dampers Open/Closed			
Drive Heating F/B Dampers Open/Closed			
Drive CW Valve Open/Closed			
Drive Heating Valve Open/Closed			
Freeze Protection (35°F)			
Fire Protection (SA/RA)			
High Static Protection (3" WG)			
High Humidity Protection (85%)			
<b>Start AHU in Occ. Mode/Min OA</b>			
Supply Fan Start			
Return Fan Start			
OA Damper Open to Min			
RA Damper Open			
Relief Damper Closed			
Heat Valve, F/B Damper Control (50°F LAT)			

<b>Remarks:</b> <i>P=Pass, F=Fail, *=Corrective Action Required</i>

## Functional Performance Test

(Project)

**System:** Air Handling Unit

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<i>Functional Performance Test</i>	<i>P</i>	<i>F</i>	<i>Remarks</i>
<b>Start AHU in Occ. Mode/Min OA (cont.)</b>			
SA Flow Station Functional			
RA Flow Station Functional			
OA Flow Station Functional			
SF VFD Maintains Duct SP			
RF VFD Maintains Offset			
OA Traq Damper Maintains Min OA			
CW Valve Control (55°F LAT)			
Humidifier Control (30% RH Building)			
VAV's Under Control			
Filter Monitor Alarm			
Building Pressure Alarm			
<b>Override VAV's to Max (Full Cool)</b>			
SF Motor Amperage			
RF Motor Amperage			
<b>Run AHU in Occ. Mode/Max OA</b>			
OA Damper Open			
RA Damper Closed			
Relief Damper Open			
SF VFD Maintains Duct SP			
RF VFD Maintains Offset			
CW Valve Control (55°F LAT)			
Humidifier Control (30% RH Building)			
VAV's Under Control			
Filter Monitor Alarm			
Building Pressure Alarm			
<b>Override VAV's to Max (Full Cool)</b>			
SF Motor Amperage			
RF Motor Amperage			

**Remarks:** P=Pass, F=Fail, \*=Corrective Action Required


## Functional Performance Test

(Project)

System: VAV

Tag:

Service:

<i>Functional Performance Test</i>	<i>P</i>	<i>F</i>	<i>Remarks</i>
<b>Confirm Occupied Mode</b>			
Design Setpoints (CFM/Temperature/Time)	----	----	
Actual Setpoints (CFM/Temperature/Time)			
<b>Drive VAV Closed</b>			
Airflow decrease to zero			
<b>Drive VAV Open</b>			
Airflow increase above Max			
<b>Drive VAV to Max (Full Cool)</b>			
Design Maximum Airflow	----	----	
Maximum Airflow From TAB Report	----	----	
DDC Airflow Reading ( $\pm 10\%$ of Design)			
Measured Airflow ( $\pm 10\%$ of Design)			
Hot water reheat closed			
<b>Drive VAV to Min (Full Heat)</b>			
Design Minimum Airflow	----	----	
Minimum Airflow From TAB Report	----	----	
DDC Airflow Reading ( $\pm 10\%$ of Design)			
Measured Airflow ( $\pm 10\%$ of Design)			
Hot water reheat open			
<b>Change to Unoccupied Mode</b>			
Design Setpoints (CFM/Temperature/Time)	----	----	
Actual Setpoints (CFM/Temperature/Time)			
VAV Controls to Unoccupied Setpoint			

**Remarks:** *P=Pass, F=Fail, \*=Corrective Action Required*


## Functional Performance Test

(Project)

Lab Room

Room Number:

Design Offset/Pressure:

Fume Hood Sash Position	T-Stat Mode	Supply Flow	Fume Hood Exhaust Flow	General Exhaust Flow	Table Exhaust Flow	Cabinet Exhaust Flow	Offset/Pressure
Min	Heat						
Max	Heat						
Max	Cool						
Min	Cool						
Min	Heat						
Max	Heat						
Max	Cool						
Min	Cool						
Min	Heat						
Max	Heat						
Max	Cool						
Min	Cool						
Min	Heat						
Max	Heat						
Max	Cool						
Min	Cool						

Space has been provided for several tests if necessary.  
 Some categories will not apply to every room.

<b>Remarks:</b>

## Functional Performance Test

**(Project)**

**System:** Lab. Exhaust Fan

**Tag:**

**Service:**

<i>Functional Performance Test</i>	<i>P</i>	<i>F</i>	<i>Remarks</i>
<b>Stop EF through controls</b>			
Isolation damper closed			
Bypass dampers closed			
SF stop			
RF stop			
LEF stop			
DDC Alarm			
No counter-rotation freewheeling			
Drive Isolation damper open/closed			
Drive Bypass damper open/closed			
<b>Start EF through controls</b>			
Isolation damper open			
Bypass dampers open			
LEF start			
LEF start			
SF start			
RF start			
Bypass dampers maintain duct s.p.			

<b>Remarks:</b> <i>P=Pass, F=Fail, *=Corrective Action Required</i>

## Functional Performance Test

(Project)

**System:** Chilled Water System    **Tag:**

**Service:**

<i>Functional Performance Test</i>	<i>P</i>	<i>F</i>	<i>Remarks</i>
<b>Stop Pumps through Controls</b>			
DDC Alarm			
Drive Emergency Valve Open/Closed			
Check De-coupler Valve			
<b>Start Pump through Controls</b>			
VFD Maintains $\Delta P$			
<b>Drive CW Valves to Max</b>			
VFD Maintains $\Delta P$			
Motor Amperage			
<b>Drive CW Valves to 50%</b>			
VFD Maintains $\Delta P$			
<b>Drive CW Valves to 25%</b>			
VFD Maintains $\Delta P$			
<b>Release CW Valves to Automatic Control</b>			
VFD Maintains $\Delta P$			
<b>Stop P-1</b>			
P-2 Start			
VFD Maintains $\Delta P$			

<b>Remarks:</b> <i>P=Pass, F=Fail, *=Corrective Action Required</i>

## Functional Performance Test

(Project)

System: **Lighting Controls**

Serving: **Dining and Kitchen**

<i>Functional Performance Check</i>	<i>Pass</i>	<i>Fail</i>	<i>Remarks:</i>
<b>Zone 1 Dining Area B 112</b>			
Verify switch location			
Verify switch ON/OFF function			
Lights illuminate			
Lighting circuit is identified			
Lighting panel is labeled as required			
<b>Zone 2 West Entry Alcove</b>			
Verify photocell location			
Verify photocell ON/OFF function			
Lights illuminate			
Lighting circuit is identified			
Lighting panel is labeled as required			
<b>Zone 3 Dish Washing 109</b>			
Verify switch location			
Verify switch ON/OFF function			
Lights illuminate			
Lighting circuit is identified			
Lighting panel is labeled as required			
<b>Zone 4 East Entry Alcove</b>			
Verify photocell location			
Verify photocell ON/OFF function			
Lights illuminate			
Lighting circuit is identified			
Lighting panel is labeled as required			
<b>Zone 5 Dining Area E 107</b>			
Verify photocell location			
Verify photocell ON/OFF function			
Lights illuminate			
Lighting circuit is identified			
Lighting panel is labeled as required			

<i>Remarks: P=Pass, F=Fail, *=Corrective Action Required</i>

## Functional Performance Test

### (Project)

System: **Domestic Hot Water Heaters** Tag: **WH-1, WH-2, WH-3, WH-4, WH-5, and WH-6**

<i>Functional Performance Check</i>	<i>Pass</i>	<i>Fail</i>	<i>Remarks:</i>
<b>Men Restroom 128 Sink #1</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Men Restroom 128 Sink #2</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Women Restroom 127 Sink #1</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Women Restroom 127 Sink #2</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Meal Replacement Room 121</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Kitchen 132 Sink #1</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Kitchen 132 Sink #1</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			

<i>Remarks: P=Pass, F=Fail, *=Corrective Action Required</i>

## Functional Performance Test

System: **Domestic Hot Water Heaters** Tag: **WH-1, WH-2, WH-3, WH-4, WH-5, and WH-6**

<i>Functional Performance Check</i>	<i>Pass</i>	<i>Fail</i>	<i>Remarks:</i>
<b>Kitchen 132 Sink #1 [continued]</b>			
HW temp. does not exceed 140°F			
<b>Kitchen 132 Sink #2</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Kitchen 132 Sink #3</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Kitchen 132 Sink #4</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Kitchen 132 Sink #5</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Kitchen 132 Sink #6</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			
<b>Prep Line Sink #1</b>			
Check for operational user valves			
Check for operational shut-off			
Hot water achieved when valve opened			
HW temp. does not exceed 140°F			

<i>Remarks: P=Pass, F=Fail, *=Corrective Action Required</i>