



# HVAC Commissioning Checklist

17 Oct 2022 / HVAC Commissioning for ABC Company

**Complete**

Score	<b>95.31%</b>	Flagged items	<b>2</b>	Actions	<b>0</b>
<b>Project Name</b>	HVAC Commissioning for ABC Company				
<b>Location</b>	Virginia, USA (37.4315734, -78.6568942)				
<b>Prepared by</b>	Newt Mayhew (Inspector)				
<b>Conducted on</b>	17.10.2022 13:30 PST				

**Flagged items**

2 flagged

HVAC Commissioning Checklist / DX Air Cooled Condensing Units / Installation

**Check condenser fans for proper rotation.**

Fail

Make sure to check condenser fans for proper rotation before endorsing.



Photo 1

HVAC Commissioning Checklist / Variable Air Volume Handling Unit / Coils

**Hot water piping properly connected.**

Fail

Endorse to the building contractor to coordinate proper hot water piping connection.



Photo 3

## HVAC Commissioning Checklist

2 flagged, 95.31%

### Programmable Thermostats

100%

Installed per manufacturers instructions	Pass
Programmed per designed control strategy	Pass
Verify heating operation during occupied periods	Pass
Verify heating operation during unoccupied periods	N/A
Verify cooling operation during occupied periods	Pass
Verify cooling operation during unoccupied periods	Pass
Verify system operation during occupied hours under no-load condition	Pass
Verify system operation during unoccupied hours under no-load condition	Pass
Verify system status when power is lost	Pass
Verify system operation when power is returned	Pass
Verify battery back-up (if applicable)	N/A
Measure room temperatures for compliance with set point.	Pass

### DX Air Cooled Condensing Units

1 flagged, 90.91%

#### Installation

1 flagged, 80%

Refrigerant pipe leak tested.	Pass
Refrigerant pipe evacuated and charged in accordance with manufacturer's instructions.	Pass
Check condenser fans for proper rotation.	Fail

Make sure to check condenser fans for proper rotation before endorsing.

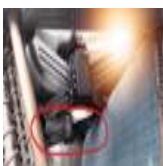


Photo 1

Any damage to coil fins has been repaired.	Pass
Manufacturer's required maintenance/ operational clearance provided.	Pass
<b>Electrical</b>	100%
Power available to unit disconnect.	Pass
Power available to unit control panel.	Pass
Verify that power disconnect is located within sight of the unit it controls	Pass
<b>Controls</b>	100%
Unit safety/protection devices tested.	Pass
Control system and interlocks installed.	Pass
Control system and interlocks operational.	Pass
<b>Variable Air Volume (VAV) Terminals</b>	100%
<b>Installation</b>	100%
VAV terminal in place.	Pass
VAV terminal ducted.	Pass
VAV terminal connected to controls.	Pass
Reheat coil connected to hot water pipe.	Pass
Manufacturer's required maintenance clearance provided.	Pass
<b>Controls</b>	100%
Reheat VAV terminal controls set.	Pass
Reheat terminal/coil controls verified.	Pass
<b>Testing, Adjusting, and Balancing (TAB)</b>	100%
Verify terminal maximum air flow set.	Pass
Verify terminal minimum air flow set.	Pass

TAB operation complete

Pass

## Variable Air Volume Handling Unit

1 flagged, 93.94%

### Installation

100%

Vibration isolation devices installed.

Pass

Inspection and access doors are operable and sealed.

Pass

Casing undamaged.

Pass

Insulation undamaged.

Pass

Condensate drainage is unobstructed. (Visually verify drainage by pouring a cup of water into drain pan.)

Pass

Condensate drainage is clear.



Photo 2

Fan belt adjusted.

Pass

Manufacturer's required maintenance clearance provided.

Pass

### Electrical

80%

Power available to unit disconnect.

Pass

Power available to unit control panel.

Pass

Proper motor rotation verified.

Pass

Verify that power disconnect is located within sight of the unit it controls.

Pass

Power available to humidifier.

### Coils

1 flagged, 83.33%

Chilled water piping properly connected.

Pass

Chilled water piping pressure tested.

Pass

**Hot water piping properly connected.**

Fail

Endorse to the building contractor to coordinate proper hot water piping connection.



Photo 3

<b>Hot water piping pressure tested.</b>	Pass
<b>Air vents installed on water coils with shutoff valves as specified.</b>	Pass
<b>Any damage to coil fins has been repaired.</b>	Pass
<b>Heat Recovery Unit</b>	100%
<b>Controls operable.</b>	Pass
<b>Power connected and rotation check.</b>	Pass
<b>Bypass dampers operable.</b>	Pass
<b>Controls</b>	100%
<b>Control valves/actuators properly installed.</b>	Pass
<b>Control valves/actuators operable.</b>	Pass
<b>Dampers/actuators properly installed.</b>	Pass
<b>Dampers/actuators operable.</b>	Pass
<b>Verify proper location, installation and calibration of duct static pressure sensor.</b>	Pass
<b>Fan air volume controller operable.</b>	Pass
<b>Air handler controls system operational.</b>	Pass
<b>Testing, Adjusting, and Balancing (TAB)</b>	100%
<b>Power available to unit disconnect.</b>	Pass
<b>Construction filters removed and replaced.</b>	Pass
<b>TAB report submitted.</b>	Pass

TAB results within +10%/-0% of L/s cfm shown on drawings

Pass

TAB results for outside air intake within +10%/-0% of both the minimum and maximum L/s cfm shown on drawings.

Pass

## Completion

### Additional Comments

Summary of actions/observations:

- Make sure to check condenser fans for proper rotation before endorsing.
- Condensate drainage is clear.
- Endorse to the building contractor to coordinate proper hot water piping connection.

### Inspector Name & Signature

*Newt Mayhew*

Newt Mayhew  
17.10.2022 14:35 PST

### Installer Name & Signature

*Kent Langford*

Kent Langford  
17.10.2022 14:35 PST

### Contractor Name & Signature

*Terrence Hills*

Terrence Hills  
17.10.2022 14:35 PST

## Appendix



Photo 1



Photo 2



Photo 3