



Machine: **Air Handler #1**
Location: **FMS/Physical Plant Building – Floor 2**
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ENERGY SOURCES:

Energy Type(s)	Energy Isolation Device(s)	Magnitude(s)	Location & Description of Energy Isolation Device(s)	Lockout Device(s)
Electrical	Electrical Disconnect	480 V	Supply VFD/Disconnect: Located behind the unit Return Fan VFD/Disconnect: Located in front/above unit Main Electrical Disconnect: Located backside of the unit	Lock/Tag
Chilled Water	Two (2) Chilled Water Valves	60-100 PSI	Chilled Water Supply/Return Valves: Located in front of the unit, next to return fan	Lock/Tag
Hot Water	Two (2) Hot Water Valves	55-95 PSI	Hot Water Supply/Return Valves: Located directly in front of unit	Lock/Tag

Air Handler #1



Supply Fan VFD



Supply Fan Disconnect



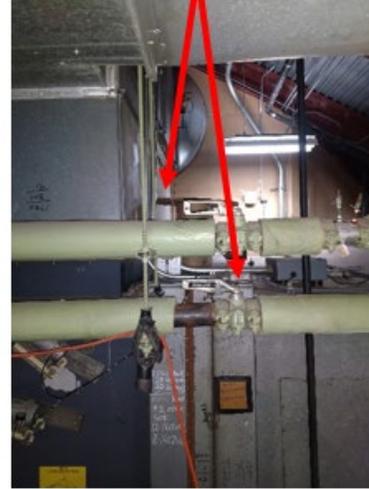
Return Fan



Chilled Water Valves



Hot Water Valves





AUTHORIZED EMPLOYEES

Refer to the attached document that displays pictures of each isolation point as well as the machine itself.

SHUTDOWN PROCEDURES & SEQUENCE OF LOCKOUT:

The steps listed below must be followed to properly shut down and de-energize this equipment.

1. Notify all affected employees verbally that servicing or maintenance is required on this machine and that the machine must be shut down and locked out to perform the servicing or maintenance.
 - a. Affected employees include the machine operator and any employees in the area
2. If the machine is operating, please follow the normal stopping procedure to shut it down.
 - a. Shut down the air handler unit at both the return and supply fan drives/disconnects. Press the OFF/Stop button at the Supply Fan Drive.
 - b. At the Supply Fan Disconnect, place the controls into the OFF position.
 - c. Place the electrical disconnect switch into the OFF position and apply a lock/tag onto the switch.
 - d. Go to the Return Fan Disconnect and place all control switches into the OFF position.
 - e. Place the electrical disconnect switch into the OFF position. Apply a lock/tag onto the switch.
 - f. Shut off both of the Hot Water Valves and apply locks/tags.
 - g. Shut the Chilled Water Valves and place a lock/tag onto the valves.
 - h. Prior to performing work on the unit, ensure it is properly locked out. Test the lockout by placing the controls on both disconnects back into the On/Auto positions. Press the On/Start button at the VFD for the Supply Fan. The unit should not start if properly locked out. Place the controls back into the OFF position prior to performing any work.
3. Authorized personnel will have equipment assigned to them and will be kept with them at all times. If an extended lockout is needed, there is a lockout station at the shop. This will be the location to acquire the equipment and make sure it is signed out properly.
4. Each authorized person that will be servicing the equipment needs to apply their individual locks and tags to the lockout device(s).
5. All stored or residual energy must be dissipated or restrained
 - a. Ensure all water lines are bled if needed to work directly on a line.
 - b. Put a lock/block onto the fan blades as necessary.
6. Verify that all energy has been dissipated by first checking that no personnel are exposed, then attempt to restart the machine. Return the operating controls to the "neutral" or "off" position after verifying the isolation of the machine.
7. The machine or equipment has now been locked out.

RESTORING EQUIPMENT TO SERVICE:

The steps listed below must be followed to properly release this equipment from a locked or tagged out condition and restart it.

1. Inspect the machine and the immediate area around the machine to ensure that nonessential items have been removed and that the machine components and guards are operationally intact.
2. Check the work area to ensure that all employees have been safely positioned or removed from the area.
3. Verify that the controls are in neutral.
4. Remove the lockout devices and reenergize the machine.
5. Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.