



Building Cooling/Heating Switchover: What Should I Expect this Fall?

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**W E L C O M E
T O I O W A**

WINTER IS AT 6AM

SPRING STARTS AT 10AM

SUMMER IS AT 2PM

FALL STARTS AROUND 4:30ISH

DRESS ACCORDINGLY

Why Do We Switchover From Cooling to Heating?

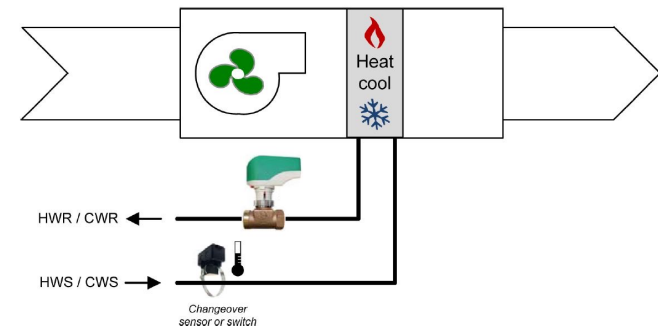
- Freeze Protection for AHU coils
- Some buildings cannot provide heating and cooling at the same time due to age of the systems

2-Pipe Systems

Two-Pipe HVAC Systems

A two-pipe system uses half the hydronic piping required by a four-pipe system, which results in a lower cost and a shorter installation time. The system is also more compact, reducing the space requirements of mechanical rooms. Maintenance is also simpler in a two-pipe system, thanks to the reduced number of piping fixtures and valves.

The main limitation of a two-pipe HVAC system is lack of operating flexibility. The hydronic piping circuit that runs through the building connects to either the boiler or the chiller depending on overall needs, and all building areas must operate in the same mode; heating some areas while cooling others is not possible with this system configuration.



**These buildings do not typically have air handling units, but rather fan coils or radiant heat*

2-Pipe Buildings

- Halsey Hall
- Van Allen
- Phillips Hall
- English-Philosophy Building
- Iowa Memorial Union
- North Pharmacy
- Field House
- Wendell Johnson Speech and Hearing
- Medical Education Building
- Westlawn
- Medical Research Facility
- Medical Research Center
- Jefferson Building (*Treated like a 2-pipe building because of boiler*)

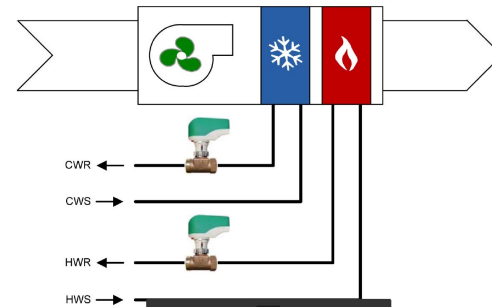
Note: HH, JB, College of Dentistry, and IMU-Hotel have special circumstances that may require an early switchover



4-Pipe Systems

Four-Pipe HVAC System

This system configuration uses twice as much piping as a two-pipe HVAC system, and thus it is more expensive and takes longer to install. In addition, a four-pipe system requires more space to accommodate two hydronic piping circuits that run through the building. The increased number of fixtures, valves and connection points also results in a more demanding system in terms of maintenance.



**These buildings typically have air handling units that supply conditioned air to the entire building*

Chilled Water Coil Draining

Purpose:

- Offers freeze protection of chilled water coils should we have an event occur

High-Level Procedure:

- Shut coil, drain water
- Flush with glycol to provide freeze protection should any water remain

University of Iowa Guidelines

We have established a data-driven approach based on weather conditions

Principles for Initiating a Switchover from Cooling to Heating:

- Overnight temperatures are consistently near freezing
- Daytime temperature highs are consistently below 60F - 65F
- Critical spaces will be given higher priority and evaluated on a case-by-case basis

What Should I Expect?

Until buildings have been transitioned to heating mode,

- Cool temperatures in the morning
- Slightly humid air

Once buildings have been transitioned to heating mode,

- Warmer temperatures and drier air in buildings
- Slightly reduced airflow within a 24-hour window while units are off for the switchover

Communication to share:

Send To: Building Coordinators of 2-pipe buildings

Dear Building Coordinators,

As discussed in the October Building Coordinator meeting, we will soon begin the switchover of your 2-pipe system from cooling mode to heating mode. Beginning the week of [REDACTED], Facilities Management will begin this annual fall process and we anticipate wrapping up the process by the end of [REDACTED].

Here is a template for you to send to your building occupants if you would like. Please feel free to modify as needed for your communication methods:

Please read this notice from Facilities Management regarding the seasonal switchover for [REDACTED].

Facilities Management will begin the building switchover process from cooling mode to heating mode in the near future. [REDACTED] has a 2-pipe system. This means that once the switchover is done, the facility will not have a supply of chilled water necessary for cooling. Facilities Management schedules this switchover based on the weather forecast. With long-term forecasts showing below 60F-65F during the daytime and near freezing at nighttime, this process will begin soon.

Please remember that during these transition months, individual comfort is best addressed by wearing layers in either warm or cool weather situations. During the switchover, unusual noises that are not heard during a normal workday may occur. Please close and securely fasten all windows, doors, and dampers when appropriate to prevent building temperatures from dropping and causing frozen and/or broken pipes or any other cold weather issues.

Facilities Management will be working through our building switchover in addition to other buildings across campus with an anticipated completion date of [REDACTED]. Thank you for your patience during this process! If you have any questions or concerns, please contact FM@YourService using the BLUE button on the portal.

Regards,

Tom Moore
Senior Manager of Operations and Maintenance



200 University Services Building
Iowa City, Iowa 52242

Building Name & Dates, to be filled in by Steph prior to sending

Send To: Building Coordinators of 4-pipe buildings

Dear Building Coordinators,

As discussed in the October Building Coordinator meeting, we will soon begin the process of preparing your building for heating season. Beginning the week of [REDACTED], Facilities Management will begin this annual fall process.

Here is a template for you to send to your building occupants if you would like. Please feel free to modify as needed for your communication methods:

Please read this notice from Facilities Management regarding the annual fall transition to heating mode for [REDACTED].

Facilities Management is going to begin the transition process from cooling mode to heating mode in the near future.

Please remember that during these transition months, individual comfort is best addressed by wearing layers in either warm or cool weather situations. During the transition, unusual noises that are not heard during a normal workday may occur as our teams work to prepare your building. Please close and securely fasten all windows, doors, and dampers when appropriate to prevent building temperatures from dropping and causing frozen and/or broken pipes or any other cold weather issues.

Facilities Management will be working through our building transition in addition to other buildings across campus. Thank you for your patience during this process! If you have any questions or concerns, please contact FM@YourService using the BLUE button on the portal.

Regards,

Tom Moore
Senior Manager of Operations and Maintenance



200 University Services Building
Iowa City, Iowa 52242

Building Name and Date, to be filled in by Steph prior to sending

What Can Building Coordinators Do This Fall?

- Remind occupants to please plan to dress in layers during the Fall season to help with comfort!
- Remind occupants to please be patient during the Fall
- Consider asking that temperature portal requests flow through a single point of contact during the Fall to reduce duplication of effort

Thank you for your partnership!