

fire alarm and suppression systems; and com

munication systems, including data exchange systems.

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Leadership Orientation

It is beneficial for Leadership to have a basic understanding of the utility systems at an outcome level. There is no need to understand how to operate the equipment/system/features, but leadership should understand the impact if the specific equipment/system/features failed.

Working with the Facilities team through tours and discussion leadership could develop a basic understanding. The following are suggested discussion points:

- 1.

Survey Finding: A survey finding at EC.02.05.01 EP 1 and 15 will result in CLD Status

A survey finding at EC.02.05.01 EP 1 (COP

management (add-mixing, chemotherapy preparation, microbiology, etc.), and sterile processing and supply rooms.

What is Ventilation?

Ventilation is moving air from one location to another. This includes bringing in air from the outside (supply air) and removing air from the inside (exhaust or return air).

Supply Air is taking air from the outside, which is conditioned by cooling or heating as the air moves through a series of coils in an air handling unit. To save energy in some air handling units has returned air being blended with outside air. Next the air is cleaned by filters and discharged into the occupied space. As the air moves through the building in ducts, the ducts pass through barriers (walls). To protect the barriers dampers are in place.

The exhaust system removes the air from an occupied space. Exhausted air is either removed from an occupied building or re-conditioned and re-used. As air is removed, it is replaced by supply air which is referred to as air exchanges.

Practical Test

The Joint Commission uses a passive test known as a “tissue test” or “flutter test” to screen ventilation. This test is only to be used as a pre-screening tool to evaluate if further investigation needs to occur. To perform the flutter test take a tissue and let it hang just off the floor near the bottom edge of a door. If the tissue indicates incorrect air flow, stabilize the area by closing doors and windows, wait a few minutes and re-test. If the organization presents a Testing & Balancing report the following questions should be asked:

- A. When was the balancing done (seasonal issues);
- B. Are any specific requirements (such as keeping a door closed) needed to achieve satisfactory results;
- C. Is the monitoring frequency adequate? Based on what? How do you ensure system is functioning as expected?

During Survey

EC.02.05.01 EP 15 will generate a CLD when discovered during survey. However, if the organization can repair the **process** that led to non-compliance the Life Safety Code Surveyor (LSCS) may review the corrective action. Following LSCS review, the LSCS may contact the Central Office to discuss the **possibility** of reducing the CLD to SLD, however the Requirement for Improvement (RFI) will remain in the survey report. This will then require the organization to submit the Evidence of Standard Compliance (ESC) after survey, but as a SLD not require the follow-up survey. Resolution should include the area affected by the equipment identified as non-compliant, not just the identified room/area. The organization must ensure the entire zone is balanced and that there is an ongoing process to assess and ensure compliance.

Analogy: Your Home Furnace and a Commercial Air Distribution System

Your home furnace is similar to the commercial air handlers used to condition the air in our healthcare organizations. The common home furnace uses the air that enters the home through various inlets (i.e.

door opening, windows, and building leaks), or air from that return air vents (which is air that has been conditioned and used in the house and enters the return air vents. These return air vents are usually located throughout the home without a damper. Regardless of the source of the air, the air enters the supply side of the furnace. As the air enters the furnace it is first cleaned by filters, and then travels through the burners and then through the air conditioning 'A' coil. In heating months the burners are active and heats the air; in cooling months the burners are off but the 'A' coil is cooled by refrigerant which cools the air. Once the air is conditioned (either heated or cooled) it is forced by a fan into the duct work system. Once in the ductwork the air moves through the building and is discharged through vents the usually have a damper feature.

Comparison:

	Residential Heating, Air Conditioning & Cooling	Commercial Heating & Cooling
Receives outside air	X	X
Receives air from return air vents (some restrictions may apply)	X	X
Heats air by burners in the unit	X	
Heats air by heat source (i.e. boiler) and delivers heated product to the heating coil		X
Cools air by remote unit and supplies coolant to the furnace/air handler	X	X
Filters air	X	X
Humidifies/dehumidifies air	X	X
Discharges air by blowers into the occupied space	X	X
Temperature control by remote sensors (i.e. thermostats)	X	X

Evaluation of Compliance

Evaluating the Utility System: Design & Installation (EP 1)

When evaluating the design and installation of utility systems, Leadership could enter into discussion with Facilities along these lines:

- A. Assuming you are currently or have recently completed a project that affected the utility systems, ask the following:
 - a. How did you select the equipment/system/features for this project
 - i. RESPONSE: code search; discussed with peers in ASHE; Consultant recommendations with evidence of how the equipment/system/features perform
 - b. How do you know the equipment/system/features will satisfy a Joint Commission survey?
 - i. RESPONSE: a code search was conducted that aligned with the expectations of the Joint Commission.
 - ii. RESPONSE: once the project was complete we commissioned the equipment/system/features. Commissioning is when we ensure the equipment/system/features will operate/deliver to meet our requirements
- B. If you have not recently completed a utility related project, Leadership could identify one of the systems identified in the Joint Commission Glossary (click here for hyperlink) and ask Facilities the following:

- a. Can you explain the equipment/system/features of this utility system? And then, could you show me your monitoring process (as discussed in EC.04.01.01)?
 - i. RESPONSE: the identified utility system supports patient care by [explanation follows].
 - ii. RESPONSE: we monitor the outcome based on our experience or industry best practice (which may or may not include manufacturers' recommendations)