BENRICH SERVICE COMPANY TRAINING PROGRAM©

Plumbing – Building Isolation

Identify the system and where to isolate

1. Do you need to shut down the hot water, cold water or both?
2. Where is the boiler/water heater supply located?
    a. Identify which units are tied into which boiler/water heater
3. How does the system circulate?
    a. Where is the return line located?
4. Where is the main water supply?

Testing for isolation

<u>Garden Style Community (2 story / multiple building complex - ESA Hotels)</u>

1. Shut down boiler system and recirculating pumps
2. Close isolation valves for cold, hot and return
3. After the cold, hot and return at the boiler/water heater system are isolated, is the water still running at full pressure anywhere? If no, you have isolation. If yes…
    a. Pull the PRV for at least 30 seconds or longer as the expansion tank may be hold pressure
    b. An isolation valve may be bad
    c. If pressure lowered but didn't stop, there can be crossover. When this is the case, the cold main will need to be shut off
4. Before proceeding with your repair or cutting pipe, go into a unit and test for hot water and see whether it is shut off completely. This also verifies you are isolating the correct system.

<u>High-rise (4 + Stories)</u>

1. If the repair is on the main, shut down boiler, pumps and cold main.
2. If the repair is on a stack, return line or hot feed, follow these steps…
3. Which floor(s) is the return line and hot water supply lines located? Look for access panels or remove t-bar tiles in the ceiling to determine this.
    a. If there are multiple loops, the goal is to only isolate the loop that needs repairing to keep the rest of the units up and running.
4. Are there stack isolation valves? Does each unit have its own isolation valves?
    a. If yes, shut off at these locations first
        i. Once the stack is shut down, open all fixtures in a top floor unit and wait for water to completely stop. Then proceed with repair.
    b. If not, resort to shutting down the entire system including the boiler, pumps and cold main.