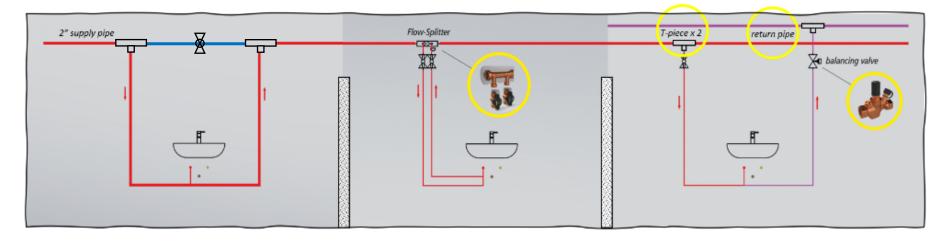


## In-room circulation for IECC 404.5.1 compliance

To provide in-room circulation for hot water and effectively reduce non-circulating pipe lengths (compliance with IECC code 404.5.1), a loop configuration into a room is generally required. This can be accomplished with either a master pipe serpentine layout, a Kemper Flow-Splitter valve or with a traditional 3-pipe configuration with balancing valves.

In many cases, significant material cost savings will be realized using the Flow-Splitter.



## 1. Serpentine master supply pipe into room

- Difficult to route with large pipe and insulation
- > Expensive piping materials
- Supply isolation challenges
- Legionella Growth

## 2. Kemper Flow-Splitter Valve

- ➤ No return piping
- Smaller pipes
- No balancing valves

## 3. Traditional method with return piping & balancing valve

- > Return piping costs
- Ongoing balancing valve adjustments
- More connections/points of failure