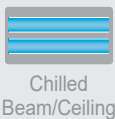
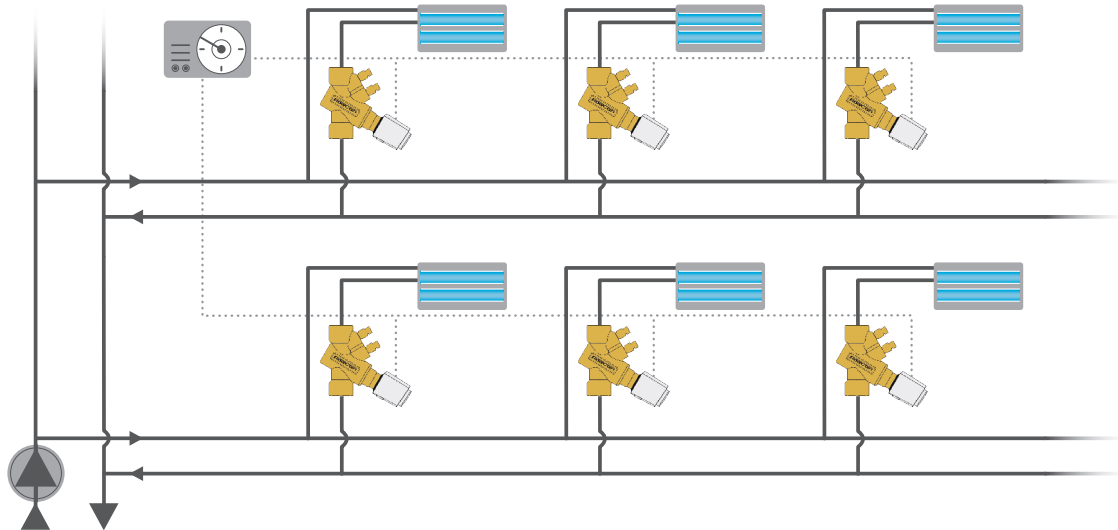


Chilled Beams/Ceilings

with Temperature Control



System Functionality:

Chilled beams and chilled ceilings are both ceiling-based cooling devices and alternatives to FCUs. Chilled water is piped to the unit and provides convective cooling. As warm air rises it is cooled by the chilled beam/ceiling; once it is cooled, the air falls back to the floor and the cycle starts over. Without proper balance and control, flow rates will fluctuate as pressure fluctuates due to varying system load resulting in inaccurate room temperature, dissatisfied users and increased energy consumption. This can be prevented by installing a Temperature Control Valve (TCV) on every chilled beam or ceiling. TCVs will help secure no overflow and help reduce energy consumption.

Requirements:

The TCV will react to system pressure changes and regulated the chilled water flow to required flow by adjusting the actuator position. This helps the unit to be accurately controlled even at reduced loads.

Solutions:

The solution is to mount a TCV on every single unit and FlowCon offers:

- FlowCon EVS with balancing (pre-set stainless steel insert) and ON/OFF control.

Benefits:

- Assures correct flow for each unit automatically - also at partial loads - securing occupant comfort
- A serviceable solution due to insert-design
- Energy efficiency with regulation starting at only 10 kPaD
- Cost savings due to reduced commissioning time
- Tamper-proof
- A proven technology - long life expectancy.

— FlowCon TCV —



EVS