



5.16 Mechanical Systems Mechanical Systems

5.16.1 Permits

Permits (e.g. mechanical, plumbing, etc.) are required as per City of Calgary guidelines, if doubts exist please contact Campus Engineering or Campus Architecture for any clarifications.

5.16.2 Sustainability Requirements

1. Minimum Indoor Air Quality Performance:

- a. For mechanically ventilated spaces, determine the minimum outdoor air intake flow for mechanical ventilation systems using the ventilation rate procedure from ASHRAE 62.1 (latest edition). The indoor air quality procedure defined in ASHRAE Standard 62.1 may not be used to comply with this prerequisite.
- b. Ventilation system designs must meet the minimum requirements of ASHRAE Standard 62.1 latest edition, Sections 4–7, Ventilation for Acceptable Indoor Air Quality.
- c. For mechanically ventilated spaces, monitor outdoor air intake flow as follows:





- j. Provide side stream filters that are common to both pumps. Ensure filters are properly sized and oriented.
 - k. Provide corrosion coupons
4. Cooling Systems
- a. Provide two way control valves at all chilled water connections cooling coils
 - b. Select systems based on maintainability, controllability and life cycle costs.
 - c. Provide individual thermostatic zoning for each instructional space.
 - d. Refer to figure below for typical cooling equipment piping schematic.
 - e. Regarding coil detail below, provide isolation downstream balancing valve, double duty balancing/shutoff should not be used as a purpose of isolation.

5.16.7 Cleaning and Degreasing







