1. Winter outdoor design: Relative humidity and temperature parameters are to conform with the requirements of the Alberta Climate Code Standards (latest editions).

2. Design all heating loads and equipment, including main components with a 10% safety factor.

3. Summer design conditions: Design parameters are to conform with the requirements of the Alberta Climate Code Standards (latest editions) for temperature, humidity, etc.

4. Provide economic justification if stand alone systems are proposed.

5. Water cooled plug units are to be used for localized high loads such as server rooms, research equipment and similar areas.

6. Domestic water systems shall not be used for once through cooling applications. Condenser water closed loop systems shall be used.


10. Mechanical systems and equipment shall be designed to allow maintenance and repair / replacement. Coordinate designs to permit safety in, and ease of, maintenance:

    • Coordinate as need with the architectural and structural designers to ensure that removal for maintenance of: motors, pumps, coils, filters, etc. are not restricted by structural elements. Walkways, safety railings and structures to be coordinated with the mechanical design and constructed to permit: coils, filters, fan blowers, motors and other large items to be removed without cutting, reworking or otherwise modifying the railings and walkways.

    • Coordinate provision of support systems both inside and outside of major mechanical equipment that will allow heavy components to be safely removed from inside of equipment and lowered to locations for removal or repair. As needed, coordinate the provision structural supports tied through to the inside of Air Handling Units (or other large mechanical equipment units) to support hoisting and transport rail systems (inside of the equipment) to allow heavy items to be safely removed.

    • Coordinate with the AHU equipment manufacturer to ensure that U of A requirements for uniform/adequate lighting and maintenance power are met. See U of A lighting and
electrical design guidelines.

11. Conform to Vibration Specification for Rotating Equipment Specification located on the University of Alberta website (to be confirmed) for all rotary and reciprocating equipment.

12. Approved VFD manufacturers are only those listed on the University of Alberta website in the U of A VFD Specifications.

13. The primary source of heat for most projects will be steam from the Central Utilities Plant.