

## **PART 1: GENERAL**

### 1.01 General Requirements

- A. This standard is intended to provide useful information to the Professional Service Provider (PSP) to establish a basis of design. The responsibility of the engineer is to apply the principles of this section and the ones that follow so that the Sam Houston State University may achieve a level of quality and consistency in the mechanical design of their facilities. Deviations from these guidelines must be justified through LCC analysis and submitted to the University for approval.
- B. Not used
- C. Not used.
- D. Use gravity drain of liquids at all possible places. Recover all fin water sources to the extent of economic feasibility.
- E. SHSU preference for mounting of air handler temperature control valves is for serviceability from floor without the use of ladder; maximum height 5'0" AFF. Where service valves are mounted 8 feet above the floor provide service platform, catwalk, or Rotam chain wheels and safety formed chains. Do not block equipment access when locating temperature control valves.
- F. Indicate required service clearances on drawings with dashed lines. Design shall provide for service and maintenance access to all equipment. Service area shall comply with codes and manufacturer's recommendations and shall be reasonably planned for access.
- G. Design shall include plan for removal of all equipment. Plan shall indicate sizes of major pieces of equipment and clearly marked paths of removal and egress for this equipment from point of installed equipment to equipment loading area exterior to building. Entire egress path shall be coordinated for removal of equipment. Preference is to remove all equipment through elevators to ground level. Egress paths of equipment through removable louvers or roof cupolas are acceptable provided louver cupolas locations are crane accessible. Coordinate with structural to add lifting beams as required to move or replace heavy equipment.
- H. Include a 0±00 psig pressure gauge on the domestic water header. Also include an electronic pressure sensor on the header, suitable for connection to University BAS system. Provide a gauge tap on the

N. All instrumentation that can be damaged from construction dust or smoke must be ~~protected~~ protected beginning of construction. This includes all Fire & Smoke devices that are a part of the Fire Alarm System.

1.02 Mechanical Systems Selection:

A. Airside – HVAC

1. Provide air handling units configured to serve campus buildings in accordance with these standards as minimum level and consistent with good engineering practice, zoned in a p10.9 ( 2

**SAM HOUSTON STATE UNIVERSITY**  
**DIVISION 23 HEATING VENTILATING AND AIR CONDITIONING**

7. Provide accessible isolation valves on each floor.

1.03 Mechanical System Warranties

A. All mechanical systems, components and controls shall be provided with a minimum 12 month warranty initiating upon substantial completion of building. Specific mechanical components may have longer warranty periods. Warranty shall be unconditional and include material, labor and response within 24 hours of notification.

B. SHSU would like to have available purchase options for extended warranties.

END OF STANDARD