

Plumbing - Owner's Project Requirements

Division 220000-2

Reference	Specification Requirements
	Water treatment program specifications shall be included for all water systems
	All piping systems shall be painted and identified to the signage requirements of ANSI/ASME A13.1

Reference	Systems Basis of Design Requirements
	Define peak flow conditions used for design
	Define special equipment service requirements
	Define operating temperatures used for design

Reference	Design Requirements
	<p>Adequate mechanical space shall be provided, regardless of architectural programming constraints. The mechanical consultants are responsible for championing the need for adequate space as a part of the design process.</p> <p><i>Comment: "The architect wouldn't give me sufficient room" is not an acceptable excuse. If adequate room cannot be worked out internally within the design team, consult with DECA project management staff for resolution. The building systems will have to be maintained for the life of the building. Shortchanging those needs is a short-sighted process.</i></p>
	Provide space/access for equipment replacement. For example, do not place water heaters or water storage tanks behind other equipment, where removal and replacement would be impaired.
	Provide dielectric couplings where dissimilar metals are joined or in contact with metal wall penetrations. Dielectric unions are not acceptable.
	Utilize floor sinks in custodial closets
	Filtration of potable water at building entry is preferred, if not, domestic hot water and HVAC system use of potable water shall be filtered separately.
	Custodial closets shall be separated from mechanical rooms
	Loading docks shall have a custodial closet in close proximity.
	Major custodial areas shall include provisions for clothes washing machines and dryers.
	Clothes dryers shall vent to the exterior of the building.

	Plumbing lines shall not be routed on the roof.
	Provide detail showing gas-fired equipment hard piped to point of gas connection.
	Backflow preventers at water entry and as required elsewhere shall be located in readily accessible mechanical spaces. Include upstream strainers and adequate drainage provisions.
	Flexible water hoses supplying appliances or HVAC equipment shall be protected and reinforced with metal braiding of a material appropriate for the application.
	Plumbing fixture and accessories shall be submitted to the User Agency and their operating staff for approval as scheduled in the Design Deliverables Checklist.
	Provide a hose bib at all toilet rooms with multiple fixtures and all shower rooms.
	Utilization of plastic piping components within a building is not permitted without written authorization from DECA. <i>Comment: This does not preclude consideration of plastic piping in certain applications, but written authorization must be obtained from DECA. Discuss with DECA project management.</i>
	Utilization of plastic piping components for buried building utility piping is permitted with appropriate utility marker identification and protection.
	Potable water piping shall be Type L hard copper above grade and Type K hard copper below grade without written authorization from DECA.
	Below grade utility lines shall be clearly and accurately marked with appropriate marker tape.
	Modular plumbing equipment systems shall be piped in a manner to facilitate removal of one module without disabling operation of the system.
	Sanitary cleanouts shall be furnished with Bronze finish.

Reference	Functional Requirements
	All piping systems shall include provisions for proper draining and venting.
	Laboratories and similar applications shall have chemical resistant plumbing components suitable for the current and foreseeable applications.
	Provide domestic water service hydrants for grounds maintenance as required by Using Agency's requirements.
	Domestic hot water to custodial closet fixtures shall be 140° F
	Major mechanical equipment shall be located in a restricted access area on the ground level of the building.

	Refrigerated plumbing equipment shall be selected considering the requirements of the Clean Air Act of 1990, ARI/ASHRAE Standard 15, long term availability of refrigerants and economics.
	Design shall meet the requirements of KRS # 58.200
	All water systems shall include a detailed flushing and cleaning procedure which protects the project equipment

Reference	Administrative Requirements
	Permitting Requirements