

## Historically Underutilized Business Program

Sam Houston State University Office of Facilities Planning and Construction is committed to promoting the participation of minority, women owned, and small businesses through the Historically Underutilized Business (HUB) Program for the procurement of goods and/or services. The procurement process utilized by the SHSU seeks to provide equal opportunity and equal access in the design and construction opportunities on projects managed by Facilities Planning and Construction.

## General Information

The "Design and Construction Standards" is intended as guidance for the project architect/engineer team and the contractor team during the design and construction process for The Sam Houston State University Capital Projects. The content covers specific design criteria, the design process and administrative procedures for permanent buildings on SHSU. Subsets of this document will pertain to renovation, civil, etc. type projects. Many but not all requirements for each Campus Agency of SHSU are covered. The Project A/E, CMAR or DB shall also refer to items covered in their Services Agreement and in the project's Program of Requirements (POR).

The "Design and Construction Standards" shall be used along with the project specific Program of Requirements and the Services Agreement.

In the event of conflict between contract document and specific project requirements the more stringent requirements shall apply. The A/E, CMAR or D-B shall contact the Project Manager with Facilities Planning & Construction for clarification.

The guidelines in this document are not intended to prohibit the use of alternative systems, products or devices not covered in this document. All alternatives shall be documented by the A/E, CMAR and DB and submitted to the Project Manager for approval by Facilities Planning & Construction prior to implementation.

## Design Philosophy

### Design Quality

## Campus Design Standards

Building HVAC systems, and Electrical Level of control and integration shall be determined by SHSU Facilities Management.

## Codes and Standards

Comply with all state and Federal laws applicable to construction. The Project A/E and FPC Project Manager shall also cooperate with municipalities when tying into local codes. Architect and Engineer shall design to the latest codes and standards adopted at start of design.

## General Requirements

The Project A/E shall design SHSU projects to comply with the current editions of all applicable codes and standards and advise the Owner of code revisions having impact on the project design.

In the event of the need for interpretation among the codes and standards, Project A/E shall inform FPC of the need for an interpretation and FPC will establish the requirements for compliance.

Local municipal building codes are not applicable to construction on State of Texas properties, which includes all properties owned by Sam Houston State University

However, if it is necessary for a local authority to view any aspect of 6.6 (S)3.6 (U)6.7 -4.6 (e) /P <</MCIp 530.04

## Design Basis

1. Current adopted version of NFPA 101
2. Current adopted version International Building Code.

## Architectural Design

1. SHSU Exterior Signage Standards: SEE APPENDIX I
2. SHSU Interior Signage Standards: SEE APPENDIX II
3. SHSU Room Numbering Standards: SEE APPENDIX III

## Communications Design

1. TIA/EIA Standards

## Permits & Submissions

The Project A/E is required to submit sealed documents for an accessibility review. The required review should be accomplished by a Registered Accessibility Specialist located on the project site. The same Registered Accessible Specialist (RAS) will be utilized for the plan review and the post construction inspection.

The A/E will be required to secure permits from state and federal government agencies when necessary, such as Texas Department of Highways and Public Transportation, Health Department, etc. The cost of any permits will be borne by the Owner.

The Project A/E will complete and submit the Energy Conservation Design Standard Certification form for Nonresidential Buildings and compliance forms required by the current adopted version ASHRAE 90.1 as part of the required Energy Report to the FPC Project Manager.

The project A/E will complete and submit the Energy Conservation Design Standard Certification form for Residential Buildings and compliance forms required by the current adopted version International Energy Conservation Code as part of the required energy report to the FPC Project Manager.

## Environmental Practices

### Building Materials

Wherever possible, products, and materials with recycled content and no or low volatile organic compounds (VOC) shall be specified in the building design.

Material containing any measureable amount of asbestos shall not be allowed.

## Indoor Air Quality

The design shall follow current adopted version of ASHRAE 62.1

## Space Standards

### Calculation of Building Areas

The method used to calculate the assignable square feet and gross square footage is based on guidelines from The Texas Higher Education Coordinating Board (THECB). These guidelines are intended to establish common standards for building inventory for all state institutions of higher education. In large part these guidelines are also based on those from the U.S Department of Education, National Center for Education Statistics.

Area shall be derived from the BIMs. The A/E is responsible for maintaining the areas in the BIM.

## Building Core Elements

### Building Entrances

All normal faculty/staff/student entrances require card readers & connections for remote access control. Every exterior entrance, to include every other door leaf, requires monitoring connections, including mechanical rooms and roof hatches/access.

All Public entrances shall have at least one (1) complete path of entrance with a powered opener.

All exterior doors must be designed for control by the university remote access control system.

All main entry points to a building must be provided with a vestibule that performs as a lock. Weather protection must also be provided for the exterior doors. Minimum this shall consist of door sweeps, weather seals at the door head and jambs, at the bottom of the door, and overhead rain drips above the door that extend at least 8" beyond the jambs of the door.

### Interior Doors

All Office & Classroom doors are required to have vision panels which meet current ADA standards and Current Life Safety codes.

## Building Circulation

**SAM HOUSTON STATE UNIVERSITY**  
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not less than 1/4" = 10", shall be prepared for each room to indicate that adequate ventilation and maintenance areas are provided. The A/E shall provide all required clearances and pulls required for maintenance and repair of equipment for coordination purposes. All equipment rooms must be designed to control noise transmission to adjacent spaces including corridors. Depressure of all mechanical rooms 1 1/2 inches and uniformly slope the entire floor to minimum 4 inch floor drains connected to the building sanitary sewer system. All mechanical rooms containing HVAC equipment shall be designed to current version of ASHRAE 55. Provide hose bib connection in all mechanical rooms and roofs which have equipment which must be regularly cleaned.

## Electrical Closets

Electrical closets must be designed so that three walls stack vertically and NO water is run on a structural beam that would interfere with vertical risers. Do not run building utility capable of conveying liquids through or above electrical closets. The only exception allowed is the branch sprinkler line serving only the sprinkler head in an electrical closet. NFPA 13 allows electrical closet to be un-sprinkled if a 2 hour wall and door are used. Access to electrical closets must be from within the building from the corridor system and not through any other space. Door should open out from space in usable interior floor and wall area.

## Main Switchgear room

The main electrical switchgear room for a building should be located on the ground level except for when first floor elevation is below 50yr+2ft flood plain. It shall never be located above classrooms, custodial closets or at an elevation that

handler rooms must be from within the building from the corridor system and not through any other space. Door should open out from space to maximize usable interior floor and wall area. Provide a minimum of 2 feet clearance on two sides and one end of the air handlers. Provide for removing



