

I. INTRODUCTION

1.03 Codes, Rules, Laws, & Requirements

- A. Every building owned or leased by Texas State University shall be designed and maintained in compliance with the applicable construction codes in this section. The Project Architect/Engineer shall prepare a written code and standards analysis for each project reviewed by Texas State University. This analysis shall provide a comparison of the requirement of the below listed codes and standards for each code issue and an indication of which code requirement is being applied to the project. If a conflict arises between the codes and standards, the default is to design to the more restrictive and more protective code. The final approved Building Code Analysis shall be placed in the project construction drawings for future reference by Texas State University.

Texas State University also requires the Project Architect/Engineer to comply with the National Fire Protection Association Life Safety Codes (NFPA 101 or, NFPA 101A and NFPA 1) adopted and enforced by the Texas State Fire Marshall Office of the Texas Department of Insurance; and comply with certain provisions of the local fire department that provides fire protection services to the institution. The provisions include locations and dimensions for fire-fighting access, including fire lanes; locations & specifications for standpipes, fire hose cabinets, fire control room, & fire hose connections; elevator requirements; & other similar matters. The State Fire Marshall is the code Authority having Jurisdiction (AHJ) for all issues pertaining to NFPA Life Safety Codes. Texas State University Environmental Health Safety and Risk Management has been delegated the local AHJ for projects on the university's campus. Facilities Planning Design and Construction (FPDC) is the code authority having jurisdiction for construction projects for all codes other than NFPA Life Safety Codes. FPDC is responsible for facilitating resolution of conflicts and interpretation for non-NFPA codes.

- B. Buildings and sites are to be designed in conformance to the applicable requirements of the following codes:
1. 2018 International Building Code
 2. 2021 International Mechanical Code
 3. 2020 National Electric Code
 4. 2018 International Energy Conservation Code (IECC)
 5. 2021 Uniform Plumbing Code
 6. The Texas Engineering Practice Act and the Texas Board of Professional Engineers Rules and regulations.
 7. The Architects' Registration Law and the Texas Board of Architectural Examiners Rules and Regulations
 8. Texas Health Asbestos Protection Act and Texas Asbestos Health Protection Rules

- a. A notarized affidavit signed by the project architect, stating no materials containing lead or asbestos have been used in the project must be submitted to the University prior to final acceptance of the project as per Texas State University UPPS No. 04.05.09. The A/E shall require like affidavit from the contractor
9. National Fire Codes
- a. The National Fire Protection Association Life Safety Code (NFPA 101) 2015 editions is the adopted inspection standard of the State Fire Marshal's Office. The Life Safety Code determines the design, construction, and operation of occupied buildings. When other codes are utilized for building design elements, the standards of the Life Safety Code prevail. Any deviation from this standard must be approved by the State Fire Marshal as the Authority Having Jurisdiction (AHJ), otherwise the deviation will be considered a deficiency. All concept or design submittals shall address fire protection and life safety criteria and shall be submitted as separate analyses.
 - b. NFPA standard 170, fire safety symbols shall be used for Architectural and Engineering drawings.
 - c. Areas for analysis are as follows:
 - 1). Type of construction;
 - 2). Classification of occupancy;
 - 3). Building separation or exposure protection;
 - 4). Location of all fire rated walls including fire rated doors, and fire dampers with identification as applicable (include fire walls, fire partitions, smoke compartments);
 - 5). Life safety provisions (exit travel distances, exit widths based on capacity and occupant load, number of exits, exit signs, emergency lighting and secondary power requirements);
 - 6). Automatic extinguishing systems (identification of all sprinkled areas and other areas protected by specialized suppression systems);
 - 7). Smoke/Control management systems, dampers, and smoke partitions. The smoke control system shall be identified by schematic diagram, where applicable, that indicates the operation of the normal HVAC mode and the smoke removal mode;
 - 8). Fire alarm system (type of alarm system and location of the fire alarm equipment with fire zones);
 - 9). Fire detection system (type of detection system and location of detectors with fire zones);
 - 10). Location of fire extinguisher cabinets and standpipes/hose cabinets.
 - d. State Fire Marshall Life Safety Code Rule Revision: The Commissioner of Insurance has adopted a revision for Fire Marshal Inspections that updates the rule to the 2012 edition

of the National Fire Protection Association Life Safety Code 101. The exception is Chapter 43 of the 2006 edition which deals with facility remodeling and renovation. In this case, the provisions of the 2003 edition remain in effect. This action was taken under the authority of the Texas Government Code 417.08. The rule is codified in the Texas Administrative Code 28 TAC 34.303.

- 1). Cooperation with Local Fire Departments: All state universities and agencies depend on local fire departments for emergency response and fire suppression. These local fire departments must have confidence that state-owned buildings and fire safety systems meet state standards and are compatible with local fire department equipment and procedures so their firefighters can promptly safely and promptly respond to emergencies.
- 2). Steps to foster positive relationships w/local fire departments:

Universities and agencies should initiate meetings with local fire departments to open lines of communication and determine correct fire response procedures.

The Texas State University Environmental Health, Safety, & Risk Management Department involved in safety, planning, operation, and maintenance must be made aware of the responsibilities they have for the compatibility and use of campus or agency equipment by the local emergency responders. All third-party contractors, architects, and engineers providing design and construction must assure the university or agency that the Life Safety Code has been taken into consideration and addressed in the planning, design, construction and operation of facilities.

The A/E is responsible to have drawings reviewed by the Texas State University Environmental Health, Safety, & Risk Management Department, before drawings are issued for bidding. Local fire departments should be consulted for local requirements and needs in water mains, building access, fire lanes and turning radius requirements, compatibility of fire hydrants, fire department connections, fire sprinkler systems, standpipe and hose systems, alarm systems, and other emergency equipment. These systems must be designed with the local department's operation in mind.

10. OSHA Standards

11. Texas Accessibility Standards and the Americans with Disabilities Act (ADA), (Article 9102, Texas Civil Statues).

- a. Texas Accessibility Standards and the Americans with Disabilities Act (ADA), (Article 9102, Texas Civil Statues). ADA accessibility of all buildings and facilities will be designed by the standards published by the State of Texas Licensing & Regulations Commission and the American National Standards Institute ANSI Standard A117.1, and the Americans with Disabilities Act.

- b. Texas State University requires the mounting height for “Push Button” of Automatic Door Openers, to be 36” A.F.F., no exceptions.
 - c. The A/E must develop Site Plans which indicate the Accessible Way from the Project to the closest “Public Way”, to include accessible parking spaces, public or University Bus Stop.
 - d. The A/E must design all new “Accessible Path” to meet TAS.
 - e. The A/E shall submit final plans and specifications to the Department of Licensing & Regulation for review concurrently with the issue of plans for building.
 - 1). Texas State University will solicit and pay for the services of a Registered Accessibility Specialist (RAS) for the review and inspection of the project. Accessibility design and consulting during development of the design documents shall be paid for by the A/E.
 - f. The A/E shall issue addendum or change proposals as necessary to correct deficiencies detected by the Department of Licensing & Regulation at no charge to the University.
12. Secretary of the Interior’s Standards for The Treatment of Historic Properties, 1995, US Department of the Interior, National Park Service.
13. ASHRAE Handbooks
14. Energy Conservation Design Standards (SECO)
- a. SECO adopts by reference the following minimum energy standards for institutions of higher education. For any new construction or major renovation project, except low-rise residential buildings, with design assignment made on or after January 1, 2021, the energy conservation design standard of the American National Standards Institute (ANSI)/American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) /Illuminating Engineering Society (IES), Standard 90.01- 2016 Energy Standard for Buildings Except Low-Rise Residential Buildings, and any errata sheet for 90.1-2016 that is published by the ASHRAE Standards Committee or the 2018 International Conservation Code (IECC) as published by the International Code Council (ICC), provided however the following buildings or structures are exempt from compliance with this section:
 - 1). a building or structure that is listed in the State or National Register of Historic Places;
 - 2). a building or structure that is designated as a historic property under local or state designation law or survey;
 - 3). a building or structure that is certified as a contributing resource with a National Register listed or locally designated historic district; or
 - 4). with an opinion or certification by the State Historic Preservation Officer or Keeper of the National Register of Historic Places, a building or structure that is eligible to

be listed on the national or State Registers of Historic Places either individually or as a contributing building to a historic district.

- b. SECO adopts by reference the residential chapter of the 2018 International Energy Conservation Code (IECC) as published by the International Code Council (ICC) for new construction or major renovation project of a low-rise residential building with a design assessment made on or after January 1, 2021.
 - c. SECO adopts by reference the “Water Conservation Design Standards for State Buildings and Institutions of Higher Education Facilities” prepared by SECO, dated April 2020, as the water conservation design standards for any new construction or major renovation project.
 - d. Before beginning construction of a new state building or major renovation project an institution of higher education must submit to SECO a copy of the certification, either by the design architect or engineer, verifying that the construction or renovation complies with the standards established under 34 Texas Administrative Code, Chapter 19 Rule 19.34, including engineering documentation. Forms are available for download on the SECO website: <https://comptroller.texas.gov/programs/seco/code/state-funded.php>
 - 1). [Non-Residential Energy Compliance Certification \(PDF\)](#)
 - 2). [Residential Energy Compliance Certification \(PDF\)](#)
 - 3). [Non-Residential Water Compliance Certification \(PDF\)](#)
 - e. SECO also requires submission of the following forms with documentation for state-funded buildings. Please note that these PDFs can be modified (with Adobe Professional), saved to a hard drive and printed.

[ASHRAE Compliance forms](#) (interactive PDFs) for demonstrating compliance with ASHRAE-90-1-2016.

 - 1). [Building Envelope Compliance Form 2016](#) (PDF)
 - 2). [Energy Cost Budget Compliance Form 2016](#) (PDF)
 - 3). [HVAC Compliance Form 2016](#) (PDF)
 - 4). [Lighting Compliance Form 2016](#) (PDF)
 - 5). [Performance Rating Report Compliance Form 2016](#) (PDF)
 - 6). [Service Water Heating Compliance Form 2016](#) (PDF)
15. OSHA Code of Federal Regulations (CFR) Article 29 Labor Part 1926.32 (p). This code is mandatory for all Electrical Work.
 16. SMACNA Handbook
 17. American Concrete Institute (ACI)

18. American Society for Testing and Materials (ASTM)
19. CRSI Handbook of Recommended Practice for placing reinforcing bars, bar supports, specification and nomenclature
20. National Ready-Mixed Concrete Association Publication: Concrete Plant Standards and Truck Mixer and Agitator Standards
21. Texas Standard Specifications for Construction of Highways, Streets and Bridges: Texas State Department of Highways and Public Transportation.
22. S.B. No. 5-An Act relating to the Texas Emissions Reduction Plan.
23. Projects involving Site Work shall be designed to adhere to the U.S. Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES). The University is subject to Storm Water Discharge from small municipal separate storm sewer system (MS4) under the TPDES Phase II MS4 Permit (TXR040000). The University's Construction and Post Construction Plan contains procedures that will be followed to maintain compliance with the TCEQ small MS4 General permit.
24. MSDS
 - a. The A/E is to require the contractor to provide a copy of all MSDS sheets for all building products and chemicals used during the construction process to be forwarded to the Office of Facilities Planning, Design and Construction at the closure of the project.
 - b. OFPDC retains the right to withhold final payment to the A/E and contractor until such time as all MSDS sheets are received.
- C. Street cutting for street under the jurisdiction of San Marcos shall require permitting in accordance with the city's Department of Public Works.
 1. Instructions for permitting and permit form available at www.ci.san-marcos.tx.us.
- D. Work performed wholly within Texas State University Campus property is not subjected to permit requirements of the City of San Marcos. The A/E or Contractor as may be applicable shall acquire permits required by State and Federal agencies. Permits may be required from the city or local authority if the project is pursuing incentives (ex: energy efficiency incentives) as directed by the organization providing the incentive funding.
- E. Where an applicable code, statute or regulation addresses the requirements set forth in these standards, the most stringent requirement shall be included in the construction documents.
- F. If any requirements of these standards are deemed to be in conflict with applicable codes, statutes, regulations or other Texas State University standards, immediately notify in writing Texas State University project representative.