

## DIVISION 12 FURNISHING

### Section 12 50 00 - Furniture

#### PART 1: GENERAL

##### 1.01 Scope of Standard

- A. This standard provides general guidance concerning the specific preferences of Texas State University for Furniture.
- B. Texas State University recognizes that project conditions and requirements vary, thus precluding the absolute adherence to the items identified herein in all cases. However, unless there is adequate written justification, it is expected that these guidelines will govern the design and specifications for Texas State University projects.

##### 1.02 Design Guidelines

###### A. FURNITURE LAYOUTS BY THE A/E OR DESIGN/BUILD TEAM

1. *The A/E or Design/Build Team shall prepare Furniture Layouts to demonstrate that Programming requirements have been met.*
  - a. Preliminary Furniture Layouts
    - 1). The A/E or Design/Build Team shall provide preliminary furniture layouts drawn to Architectural scale for the entire building during the Design Development stage to substantiate and verify that program space requirements are being met, and to confirm electrical, telecommunication, and audio/visual locations.
    - 2). While the A/E's or Design/Build Team's furniture layouts may be further refined during the design and Construction Document process, the A/E or Design/Build team's preliminary furniture layouts shall be both well resolved and workable, and must conform to ADA standards.
    - 3). Layouts shall be based on Owner input via either the furniture committee, if one is in place during this phase, or from representation of the various User groups through the Ad Hoc building committee and the building program.
    - 4). Planning by the A/E must be provided for furniture items as they relate to doorways, circulation, windows, electrical outlets, communications system outlets, mechanical and plumbing coordination and ADA clearances.
  - b. Final Furniture Layouts
    - 1). Requests for revisions to the Preliminary Furniture Layouts, which are specifically identified by the User groups or Facilities Planning Design and Construction (FPDC) during the Design Development review period, shall be incorporated into the layouts as part of the Design Development effort.

- 2). The resulting Final Furniture Layouts developed by the A/E or Design/Build Team shall receive the approval and sign-off of the Owner.
- 3). Construction documents shall include the final furniture layouts, drawn to Architectural scale.
- 4). The A/E or Design/Build team shall convey its Final Furniture Layouts to all of its consultants so that all work is coordinated.
- 5). When final revised layouts have been completed, a clean set of floor plans for both base bid and alternates that includes walls, windows, doors, room numbers, built-in cabinetry, and equipment shall be sent to the FPDC Project Representative and reviewed with users. Transmitted electronically and in hard copy, the A/E shall advise the designer of software type and version used prior to sending (dwg. format is preferred). This set of layouts shall include a site/project location map as well as electrical/data layers for each floor.

c. Revisions to Floor Plans During Construction

- 1). The A/E or Design/Build team shall immediately notify the FPDC Project Representative of any revisions made to the floor plans during construction.

B. MOVEABLE AND NON-MOVEABLE FURNISHINGS & ACCESSORIES

1. **Moveable Furnishings That Are Not the Responsibility of the A/E or Design/Build Team**

- a. The design specifications and procurement of **Moveable Furnishings** on a given project are typically not handled by the

A/E or Design/Build Firm unless the services involved with this work is contracted through an Additional Services Agreement.

- b. Instead, if the source of funding is identified as FPDC-Managed furnishings funds, the production and design work involved in the specification, procurement, and installation/inspection of Moveable Furnishings is through an outside Interior Design Services Professional Firm.
- c. If the funding for Moveable Furnishings is identified to be Institutionally-Managed, the Component Institution then handles all the services related to this work.
- d. Typically, furnishings and accessories are purchased from previously budgeted funds reserved for this purpose and are separate from "equipment funds."

2. **Fixed or Built-in Furnishings and Accessories That Are the Responsibility of the A/E or Design/Build Team**

- a. Items that are built-in or affixed to the structural, mechanical or plumbing members of a building fall under the design and specification responsibility of the A/E or Design/Build Team and are to be procured through the Construction Contract.
- b. Those items include but are not limited to:

- Building directories, graphics, and way finding
- Built-in dishwashers, refrigerators, and icemakers
- Bulletin boards in public areas
- Carpet and carpet base
- Chalkboards and liquid writing boards in public areas
- Cubicle curtain and tracks
- Draperies on electrified tracks or that fit into wall or ceiling pockets
- Exterior and interior signage
- Parking Garage Signage
- Exterior benches and waste receptacles
- Fixed auditorium, lecture hall, and gymnasium seating
- Fixed classroom seating and tables
- Fixed laboratory casework and equipment
- Fixed lighting fixtures
- Floor to ceiling room dividers
- Food service equipment
- High density files, shelving and floor tracks (motorized and manual)
- Laboratory Benches and Tables
- Lecterns tied-in to building's A/V data and/or electrical systems
- Lockers
- Mailboxes and mail centers
- Projection screens
- Stage rigging and draperies
- Window blinds, drapery, shutters, and shades whether interior or exterior

C. ADHERENCE TO FURNITURE STANDARDS:

1. Maximizing Space and Following Requirements

- a. Space Planning shall reflect both FPDC's and the Institution's requirements. The A/E or Design/Build team shall be sensitive to FPDC's need to maximize space and shall assist in that regard wherever possible.

## 2. Following Standards in Design

- a. Building design shall accommodate standard furniture dimensions, FPDC carpet standards, FPDC window coverings standards, all safety standards and ADA requirements.
- b. The following typical FPDC standards for furniture dimensions are outlined for the benefit and coordination of the A/E or Design/Build Team in space planning.
- c. Wherever an item under consideration is not covered by the minimum standards outlined below, the latest editions of the *Texas Accessibility Standards (TAS)*, *ADA*, *IBC*, and *Architectural Graphic Standards* shall be used in setting forth minimum standards.
  - 1). Minimum Standards for Fixed chairs with Tablet Arms (herein called T/A):
    - a). Minimum back-to-back spacing: 42" when the tablet arm is in a raised position
    - b). Minimum corridor side/wall aisle: 36" clear for four or less rows. Increase one (1) inch per row for each row over four rows, with at least one aisle per every 8 seats.
    - c). Minimum clearance between top back of chair and rear wall: 6"
    - d). Minimum window aisle: 24" clear, to increase one (1) inch per row for each row after first four rows.
  - 2). Minimum Standards for Fixed Pedestal Chairs without Tablet Arms:
    - a). Spacing is the same as for T/A chairs, except back-to-back spacing minimum shall be 39".
  - 3). Minimum Standards for Fixed Tables and Armless Chairs:
    - a). Minimum lateral space per student is 30". Side aisles are the same as for fixed T/A chairs. Where chairs with arms are required, use fixed tables with moveable chairs on casters; increase row clearance accordingly. "L" shaped table supports must be 60" apart to accommodate 2 chairs, located at extreme outside edges of tables.
    - b). Minimum total (back to back) spacing for 18" deep tables is 54"; preferred spacing is 60".
    - c). Wheelchair clear floor space will comply with the Texas Accessibility Standards 4.2.4 and 4.32.
  - 4). Minimum Standards for Moveable Tables and Chairs in Classrooms:

Same requirements as for Fixed Tables and Armless Chairs (above) except that table depth shall be a minimum of 60 inches wide x 24 inches deep.
  - 5). Minimum Standards for Clear Space at Classroom Front (to Front Row):

- a). Minimum space is 8'-0". In places where a platform is provided, space shall be depth of platform plus 24" and shall account for wheelchair access.
  - b). In auditoriums or large classrooms where demonstration tables are to be used, clear space shall be increased to 10'-0" minimum. In auditoriums with stage, 30 degree line of sight rule (30 degrees up from "eye level", 3'-8" above floor) is to apply for spacing between front of stage and first row of seats.
- 6). Minimum Standards for Computer Labs:
- a). Work surface for student shall be at least 36 inches wide x 30 inches deep. This depth may be accounted for by using a 30" deep work surface all at the same height or a 24" deep work surface with an attached keyboard (as approved by OFPC Interiors Group); 42 inches wide is preferable.
  - b). Two students may share a 72"w table. Power may come from the wall, floor, or ceiling, and tables *may* be hard-wired as well, depending upon the room layout.
  - c). Provide a minimum of 2 electrical receptacles per workstation. Also, provide one voice and data per person where applicable.
  - d). Provide the appropriate number of circuits for each power entry, with a maximum of 3 computer stations sharing one circuit.
  - e). In rooms where articulated keyboard trays are provided, at least 42 inches shall be provided between rows of tables.
- 7). Minimum Standards for Auditorium Seating:
- a). Where tablet arms are used in auditorium seating, 10% shall be designed to be left-handed. Also, to meet ADA requirements, fold-away aisle chair arm rests shall accommodate the lateral transfer from a wheelchair at all designated wheelchair positions.
  - b). In assembly areas having a seating capacity in excess of 25 feet, each wheelchair location shall accommodate 2 persons seated side by side in wheelchairs, as described in TAS 4.33.
  - c). Wheelchair areas shall be an integral part of any fixed seating plan and shall be dispersed so as to provide people with disabilities a choice of lines of sight, comparable to other members of the audience. Refer to TAS 4.33.3.
- 8). Standards for Built-In Cabinetry:
- a). Shall meet ADA accessibility requirements. Where knee spaces occur, it is suggested the counter height be further dropped to 30" (with a knee space height clearance of 27 inches) so that a standard task chair may also be used.
- 9). Standards for Window Coverings:

- a). Mini-blinds or other window coverings are provided through the General Construction Contract.

#### D. RESPONSIBILITIES OF TEXAS STATE UNIVERSITY

1. The project's Ad Hoc Building Committee shall provide the A/E or Design/Build Team with information regarding general room furniture requirements for inclusion in Design Development documents.
2. All furniture design and fabric colors have to be reviewed and approved by Texas State University's President, before presentation to committee or stakeholders.
3. Texas State University Furniture Committee shall provide the FPDC Project Representative and the Interior Designer with specific detailed and refined information relating to the furnishing needs for each space in the project.
4. Texas State University Project Representative shall procure and arrange for the installation of all specialized audio-visual, office, lab, janitorial, laundry, medical, kitchen and gymnastic equipment as well as pianos and other musical instruments, computers and copier machines.
5. Texas State University Project Representative shall arrange for the hard-wiring of any movable furnishings with electrical systems requiring connection to the building power source.
6. Texas State University shall arrange for a staff member to oversee building access on an as needed basis during the course of the installation, lock up the building if the contractor is no longer on the job site, and generally assist the Project Representative during this phase of the project.

#### E. RESPONSIBILITIES OF INTERIOR DESIGN CONSULTANT

1. Interiors Consultant Project Manager
  - a. Management & Design:
    - 1). The FPDC Interiors Project Manager will be responsible for the preparation of all Contract Documents for Moveable Furnishings and Accessories including change orders, all contract administration, furnishings installation, inspection and acceptance, as well as reviewing and approving furniture dealer's application for payments.
  - b. The furniture selections shall be available through the following purchase agencies:
    - 1). TXMAS
    - 2). GSA
    - 3). Texas State Contracts
    - 4). Buy Board

- 5). Any manufacture on CMBL
- c. Design and Documentation:
  - 1). The interior design consultant shall be responsible for the selection, presentation, specification, bid documents, and on through the oversight of the furnishings installation and punch list.

This work shall be guided by and overseen by the FPDC Project Representative.

- 2). Design Presentation and Approval:
  - a). The furniture design shall coordinate with the Architect's fixed and loose furniture layout plans, as well as, coordinate with the finish schemes of the building architecture and fixed furniture designs. The furniture design and installation must meet the building occupancy schedule.
  - b). The furniture designer shall meet with the building users to determine the program requirements of furniture.
  - c). At 50% furniture design completion, a presentation shall be made to the FPDC Project Representative, for approval by the President of the university. A furniture cost budget shall also be presented.
  - d). At 95%, and final furniture design completion, a presentation shall be made to the users and FPDC Project Manager, with the cost budget, for final approval.
  - e). The Interior Designer shall prepare complete furniture plans and specifications for bidding and furniture ordering. The furniture lists must be grouped in separate packages by manufacturer, so that separate purchase orders can be prepared to each manufacturer.

**PART 2: PRODUCTS (NOT USED)**

**PART 3: EXECUTION (NOT USED)**

END OF SECTION 12 50 00