

U N I V E R S I T Y of
HOUSTON

FPC Departmental Training
Date: 1/27/2017

Goal

To increase departmental training of FPC staff to include formal and informal opportunities for professional training and certification, technical training and training specific to FPC processes

Agenda

1. Past Meeting Takeaways by Jim – 5 minutes
2. Design Guidelines Overview by Jeanne – 25 minutes
3. SharePoint Overview by Chad – 25 minutes
4. Future Topics by Jim – 5 minutes



Past Meeting Takeaways

1. Asbestos Disturbance Prevention Training Presentation – Control Options – Presented by Dash Khambhati.
2. Certificates of completion will be sent out.

Design Guidelines Overview

**DESIGN GUIDELINES
AND
MASTER SPECIFICATIONS
OVERVIEW**

Facilities Planning and Construction

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- About Us
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Facilities Planning & Construction
 University of Houston
 4211 Elgin St.
 Houston, TX 77004
 UH Inter-Office Mail Code 1004
 Contact Us



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FPC Staff Resources

Project Delivery Manual

- Project Delivery Website

Software Quicklinks

- Adept
- FAMIS
- SharePoint

Campus Quicklinks

- OGC Facilities Contracts
- Supplemental General Conditions
- (MPEC) Maintenance Project Evaluation Committee
- Purchasing Department
- Campus Design Guidelines and Standards
- Master Specifications
- UH HUB Program



INFORMATION TECHNOLOGY

- University IT
- UIT Support (including Telecommunications)
- Lync Phone

STAFF RESOURCES AT UH

- Staff Holiday Calendar
- Staff Handbook
- Staff Council
- My Safe Campus
- Human Resources

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Owner's Design Criteria

Design Guidelines







Master Specifications

CAD Standards

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Projects

Campus Design Guidelines and Standards

-  Section 00: Contents
-  Section 0: Preface
-  Section 1: Mission
-  section 2: Introduction
-  Section 3: Purpose
-  Section 4: Fundamental Campus Values
-  Section 5: Architectural Design Guidelines
-  Section 6: Landscape Design Guidelines
-  section 7: environmentally responsible design guidelines
-  Section 8: Space Guidelines
-  Section 9: Parking Standards And Guidelines
-  Section 10: Wayfinding Standards And Guidelines
-  Section 11: Lighting Design Guidelines
-  Section 12: Construction Systems And Assemblies Standards And Guidelines [UniFormat Style]
 -  Addendum A — Laboratory buildings
 -  Addendum A.01 — Laboratory Design Guide
 -  Addendum B — *withdrawn*
 -  Addendum C — Classroom and Auditoria Best Practices
 -  Addendum D — Fire Alarm and Special Hazard Protection Specifications



ABOUT FPC

HELP FOR VENDORS

Resources for Campus & Community

HUB Information

QUICK LINKS

Facilities Space Reporting Manual

CAD Standards

Campus Master Plan

SECTION 12.0

CONSTRUCTION SYSTEMS AND ASSEMBLIES STANDARDS AND GUIDELINES

INTRODUCTION

The University of Houston ("University" or "UH") expects and desires state of the art, "leading edge" design from the design consultants for its facilities. However, the design of the University's facilities must occur within certain desirable guidelines and meet certain standards. This section provides the guidelines and standards for the physical construction and systems of a project. The information is presented in the UniFormat style in order to facilitate initial estimates of construction cost.

The Office of Facilities Planning & Construction (FP&C) introduced master construction specifications in June 2011. FP&C intends that the standards and guidelines in this Section and the Master Construction Specifications be used in a complementary manner. Apparent conflicts between the standards and guidelines and the specifications shall be brought to the attention of the FP&C Project Manager, or submitted by email at <http://www.uh.edu/plantops/resources/owners-design-criteria/comment/>.

All variations from these guidelines and standards must be requested in writing and approved in writing by the University Project Manager.

Please note that in several places there are references to other sections in the *University of Houston Campus Guidelines and Standards* document (such as SECTION 7.0 SUSTAINABLE DESIGN GUIDELINES, SECTION 8.0 SPACE STANDARDS AND GUIDELINES, SECTION 10.0 WAYFINDING STANDARDS AND GUIDELINES and SECTION 11.0 CAMPUS LIGHTING GUIDELINES).

FACILITY PERFORMANCE

The following is a fundamental description of the facility expected and desired by the University.

- A. Basic Function:
1. Provide built elements and site modifications as required to fulfill needs described in the project program.
 2. The complete project comprises the following elements:
 - a. Substructure: Elements below grade and in contact with the ground.
 - b. Shell: The superstructure, exterior enclosure, and the roofing.
 - c. Interiors: Interior construction, stairs, finishes, and fixtures, except fixtures associated with services and specialized equipment.
 - d. Services: Mechanized, artificial, automatic, and unattended means of supply,

Section 12, p.2:

c. Regulatory Documents:

- i. City of Houston building, plumbing, mechanical and electrical codes with local amendments. Current versions are: 2012 IBC, 2012 Uniform Mechanical and Plumbing Codes, and 2014 National Electrical Code. The University uses NFPA Uniform Fire Code (**MAPP 07.02.01**).
- ii. City of Houston construction standards for streets, storm and sanitary sewers
- iii. National Fire Protection Association Life Safety Code 101, **2012**, with NFPA-72-2010. *Note: this edition is mandated by the State of Texas and has numerous referenced publications.*
The UH Fire Marshal's office is the officially designated Authority Having Jurisdiction (AHJ) over all Fire and Life safety-related issues. These are typically covered by NFPA or OSHA standards, as well as some municipal standards related to Houston Fire Department requirements.
- iv. Texas Accessibility Standards and the Americans with Disabilities Act (ADA) Standards for Accessible Design; where standards disagree, the most stringent criteria shall be met.
- v. Recognized design and construction standards such as National Electrical Code (NEC), American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), American Remodelers Institute (ART), Sheet Metal and Air Conditioning National Association (SMACNA), American Concrete Institute (ACI), Portland Cement Association (PCA), etc.
- vi. Campus Design Guidelines and Standards. *Note: the technical standards included in this document may exceed those established in the codes referenced above.*
- vii. State Energy Conservation Office Standards; ASHRAE/IESNA Standard 90.1-

DESIGN GUIDELINES CHECKLIST		
Jan-16	Current	Proposed

Commonly missed spaces or wrongly sized spaces

Donor recognition space has been included in the lobby of new buildings

Building entry façade design allocates space for building identification

Recycling alcoves are provided on each floor

Mech Rooms sized to allow for maintenance and equipment replacement

Mechanical rooms are stacked vertically

Attic stock room has been provided

Entry Vestibule has been provided

Lactation Room has been provided, if one is not within a 5 minutes walk

Single occupancy rest room is provided on public floors. Evaluate whether Freight elevator access from rest rooms is needed

Wide stairs in academic or other high-student use areas are provided

Stairs near entry to reduce use of elevator are provided

Automatic entry doors are provided (min. 1)

Consider storage for 10-12 move-in carts at restrooms

Commonly missed spaces or wrongly sized spaces

Design Requirements Frequently Missed

Protocols Frequently Missed

Interior Layout and Finishes

HVAC/Controls

Plumbing

Electrical

Conveying

Laboratory Issues

Fire/Life Safety

Landscaping

Parking

Sustainability

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Master Specifications

Division 00: Procurement and Contracting Requirements **Expand All**

Division 01: General Requirements

Division 02: Existing Conditions

Division 03: Concrete

Division 04: Masonry

Division 05: Metals

Division 06: Wood, Plastics, and Composites

Division 07: Thermal and Moisture Protection

Division 08: Openings

Division 09: Finishes

Division 10: Specialties

Division 11: Equipment

Division 12: Furnishings

Division 13: Special Construction

Division 14: Conveying Equipment

Division 15: Site Preparation

Division 16: Paving

Division 17: Heating, Ventilating, and Air Conditioning

Division 18: Electrical

Division 19: Communications

Division 20: Electronics, Safety and Security

Division 21: Firework

Division 22: Exterior Improvements

Division 23: Utilities

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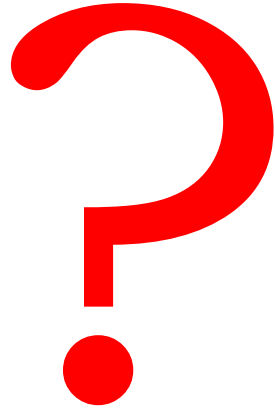
Master Specifications

Expand All

Division 00: Procurement and Contracting Requirements

- 00 60 00 Project Forms
 - 006000 - ASF - Attic Stock Form
 - 006000 - CDF - Change Order Form
 - 006000 - CPF - Change Proposal Form
 - 006000 - FCF - Final Completion Form
 - 006000 - PAIF - Part Asset Inventory
 - 006000 - PYR - Pay Request
 - 006000 - PYB - Payment Bond Form
 - 006000 - PFB - Performance Bond Form
 - 006000 - SCB - Security Bond Form
 - 006000 - SV - Schedule of Values: AIA Document G703
- 00 72 00 Uniform General Conditions (State of Texas 2010)
- 00 73 00 Supplemental General Conditions and Special Conditions

Division 01: General Requirements



SharePoint Overview

Future Topics

Future Topics

1. Mission Statements
 - a. UH
 - b. FPC
2. Contracts
 - a. Does and Don'ts
 - b. Types
 - i. CMAR/GMP (Construction Manager at Risk)
 - ii. DB (Design Build)
3. Invoice Processing
4. General Conditions
 - a. CO/CO Management
 - b. Risk Management
 - i. CCIP (Contractor's Controlled Insurance Program)
 - ii. SDI (Subcontractor Default Insurance)
 - iii. BRI (Builders Risk Insurance)
 - c. LDs
 - d. E&Os
5. 179D - Energy Efficiency Commercial Buildings Tax Deduction
6. Invoice Processing