

**UNIVERSITY OF FLORIDA HEALTH SCIENCE CENTER**

---

**DESIGN & CONSTRUCTION STANDARDS**

August 2011

**INTRODUCTION**

The following design and construction standards pertain specifically to those facilities under the operations and management of the University of Florida Health Science Center. This document supplements the University of Florida Design and Construction Standards document, and takes precedence wherever standards and requirements conflict. All information presented has been organized to correspond with the C.S.I. 16 Division format. This information, along with the University Design and Construction Standards, is to be utilized as a guide for the development of the design and construction documents for all renovation, refurbishing, maintenance replacements and new construction in Health Science Center facilities.

**TABLE OF CONTENTS**

- GENERAL DESIGN GUIDELINES**
- DIVISION 1 – GENERAL REQUIREMENTS**
- DIVISION 2 – SITEWORK**
- DIVISION 5 – METALS**
- DIVISION 8 – DOORS AND WINDOWS**
- DIVISION 9 – FINISHES**
- DIVISION 10 – SPECIALTIES**
- DIVISION 12 – FURNISHINGS**
- DIVISION 14 – CONVEYING SYSTEMS**
- DIVISION 15 - MECHANICAL**
- DIVISION 16 - PLUMBING**

## **GENERAL DESIGN GUIDELINES**

### **PART 1 – GENERAL**

- 1.1 UF Facilities Planning & Construction serves as the prime representative and central contact point for the Health Science Center during design, construction document development, bidding and construction of all projects involving physical changes and additions to Health Science Center facilities.

### **PART 2 - ARCHITECT / ENGINEER SERVICES**

#### **2.1 ALL PROJECTS:**

- A. Prior to design of a project, the Architect/Engineer will be expected to make every attempt to field verify as-built conditions, including inspection above suspended ceilings and verification of electrical circuits.
- B. The Architect/Engineer shall contact the UF Facilities Planning & Construction office during Schematic Design Phase drawing development for the assignment of new room numbers, and to verify reuse of existing. The assigned room numbers are then to be utilized on all submittals, including finish schedules.

#### **2.2 MINOR PROJECTS:**

- A. Minor Projects are defined as those with a project cost less than \$1,000,000.
- B. DIVISION – 0 SPECIAL CONDITIONS:
1. All minor projects being bid to General Contractors must include the Health Science Center Division - 0 Special Conditions as part of the Bid/Construction Specifications.
  2. Verify the date of the latest edition prior to incorporating as part of the project specification manual.
  3. MS Word copies of this specification division are available from UF Facilities Planning & Construction Web site or upon request.
- C. DIVISION – 1 GENERAL CONDITIONS:
1. For Health Science Center projects, the Architect / Engineer is to develop the Division - 1 General Requirements specifications.
  2. A sample of Section 01010 - Constructor's Use Of The Premises specification, which contains special requirements for projects in Health Science Center facilities, is included at the end of the [Division 1 - General Requirements section](#) of these standards. These requirements are to be included in the Division - 1 specifications.

3. Also see [Division - 1, Section 01000](#) of these Design & Construction Standards for more information about special requirements.

D. PROJECT DESIGN PHASE:

1. Clearly indicate the U.F. Project Number on all Drawing and Specification title sheets and title blocks, and on all correspondence, pay requests and submittals to UF Facilities Planning & Construction.

2. Schematic Design:  
The Architect shall be required to submit the demolition and proposed floor plan on 11" x 17" sheets, in addition to larger format review submittals, indicating room numbers and room functions, and showing the proposed furniture/equipment layouts.

The UF Facilities Planning & Construction office shall be contacted for the assignment of new room numbers, which are then to be utilized on all future submittals, including finish schedules.

A construction cost estimate shall be provided along with the schematic design phase review submittal.

3. Design Development and/or 50% Construction Documents:  
When review submittals for these phases are requested, the Architect /Engineer shall be required to provide a minimum of 5 sets of the project documents, along with an updated construction cost estimate.

4. 100% Construction Document Review Submittals:  
The Architect /Engineer shall be required to provide a minimum of 8 sets of the project documents, including 2 signed and sealed sets for Building Permit submittal to the University Environmental Health & Safety Division. Refer to the following Web site for information on the Building Code Enforcement Program at the University of Florida: <http://www.ehs.ufl.edu/buildcode/default.asp> Provide an updated construction cost estimate as part of the review submittal.

When required by the University Environmental Health & Safety Division, submittal of construction documents to the State Fire Marshal will be processed by UF Facilities Planning & Construction through the University Environmental Health & Safety Division. For this purpose, provide 2 signed and sealed sets of construction documents. The cost of printing these sets are to be charged against the purchase order for professional services as a reimbursable expense.

The 100% construction document review submittal shall contain all information required by the State Fire Marshal "Plans Review Procedures & Requirements", (see EH&S Web site [www.ehs.ufl.edu](http://www.ehs.ufl.edu) for the latest form), with the exception of that information contained on the "State Fire Marshal Project Plan Review Check List" (see EH&S Web site [www.ehs.ufl.edu](http://www.ehs.ufl.edu) for the latest form) and a small scale building floor

plan indicating exit locations, exit paths and distances from the project site to available exits.

E. PROJECT BIDDING OR GMP PHASE:

1. Bid Document Distribution:  
The Architect/Engineer shall be responsible for the production and distribution of all Bid Documents.

The cost of production and distribution of 10 sets shall be included as part of the base fee proposal. Any number of sets produced above the 10 sets are to be charged against the purchase order for professional services as a reimbursable expense.

2. Addendum:  
All Addendum issued and distributed by the Architect/Engineer shall include a cover letter provided by the University Purchasing Division. Any Addendum issued without this cover letter shall not be recognized at the bid opening.

F. CONSTRUCTION PHASE:

1. Constructor Pay Requests:  
The Architect/Engineer shall review all Constructor pay requests and, if approved, return the signed forms to the Health Center Projects Coordinator within two (2) working days following receipt.

If rejecting the pay request, document the reason(s) and return to the Constructor, within two (2) working days of receipt, for resubmission. Provide a copy of the rejection documentation and return transmittal letter to the Health Center Projects Coordinator.

According to State of Florida Prompt Pay Act, amended in 1995, payment by the University for "construction services" is due 20 business days following receipt of the pay request (invoice).

G. PROJECT CLOSE-OUT:

1. Record Documents:  
The Architect/Engineer shall provided the Health Center Facilities Planning & Construction Management office with an electronic AutoCAD as-built drawing file as part of the construction contract closeout on every project.

Also provide one copy of the project Specifications in WordPerfect or Microsoft Word format.

As-Built drawings and specifications shall include all addenda and change orders.

The cost for preparation of the electronic as-built drawings and specifications shall be included in the base professional fee proposal.

2. The Architect/Engineer shall prominently note or stamp on their final invoice for professional services, the words "Final Payment" or "Final Invoice".

END OF SECTION

## **DIVISION 1 – GENERAL REQUIREMENTS**

### **PART 1 – GENERAL**

#### **1.1 NOTICE TO ARCHITECTS & ENGINEERS:**

- A. On all Health Science Center Projects, the Architect/Engineer is responsible for the development of the Division 1, General Conditions specifications.
- B. In development of the Division 1 specifications, assure that Section 01010 - Constructors Use Of The Premises contains the requirements for constructors performing work in Health Science Center facilities provided at the end of this Division.
  - 1. Modify as required for other construction delivery methods (Construction Management, Design-Build, etc.)
  - 2. The Health Science Center minor project construction parking lot is not available for major project (\$1,000,000 or more) construction parking.

#### **1.2 COORDINATION:**

- A. OWNER'S REPRESENTATIVE:
  - 1. A project manager assigned by the UF Facilities Planning & Construction office will serve as the Owner's representative (Health Science Center) during project bidding and construction.
  - 2. Construction specifications for at Health Science Center facilities should list this person as the Owner's representative and prime contact person.
- B. Include in the project specifications a statement that the Constructor must notify and coordinate the scheduling of all excessively noisy construction activities with the UF Project Manager.
- C. The location of Health Center project staging areas, dumpster locations, on-site storage, and contractor parking must be prearranged with the UF Project Manager prior to bidding of the project.

---

### **SECTION 01010 - CONSTRUCTOR'S USE OF THE PREMISES**

#### **1. EXTENT:**

- 1.1 This section covers requirements for the Constructor, his/her subcontractors and employees' use of the Owner's property and construction procedures in and around Health Science Center facilities.
- 1.2 A Pre-Bid Conference will be held approximately one week prior to the scheduled bid opening (exact date and time to be arranged). At this conference, construction

procedures will be explained to all prospective bidders. It is incumbent upon the Constructor to have a clear understanding of the special requirements pertaining to:

- .1 Routes of Access to the site,
- .2 Delivery of Materials (Use of the West Loading Dock Area),
- .3 Storage Facilities,
- .4 Additional Requirements for Constructors,
- .5 Protection of Existing Facilities,
- .6 Utility Outages,
- .7 Project Inspection Procedures,

**2. REQUIREMENTS:**

**2.1 Routes of Access to the Site:**

- .1 Vehicles and equipment belonging to the Constructor, his subcontractors and employees entering upon the Owner's property shall be restricted to access routes as approved by the UF Project Manager.
- .2 Provide adequate protection for curbs and sidewalks over which trucks and equipment must pass to reach the job site.
- .3 Vehicles will not be permitted to park on any street or other area of the Owner's property except in areas so designated by the UF Project Manager.
- .4 Parking spaces for Constructor's personnel are limited, and will be designated by the UF Project Manager. For Health Science Center minor projects (\$1,000,000 or less) a limited number of spaces are available in a designated construction parking lot. A Health Science Center **Parking Permit** application form is available from U.F. Facilities Planning & Construction and shall be used by the Constructor and his personnel to obtain temporary parking permits.
- .5 Constructor shall coordinate and confirm access routing through the building with the UF Project Manager prior to construction of the project.
- .6 Constructor shall restrict all subcontractors and employees to the authorized access route and to the actual site of the Work. Employees will not be allowed to mingle in student or public areas.

**2.2 Delivery of Materials (Use of the West Loading Dock Area):**

The primary mission of the Hospital/Health Center Receiving facility is to provide an intake point for routinely needed items. Non-routine deliveries are also considered essential but must be managed to allow priority in dealing with semi-trailer and other

daily traffic. Receiving personnel are charged with the responsibility of controlling traffic, parking and the use of the West Loading Dock area according to the following rules and regulations:

- .1 Constructors entering the receiving area must stop at the gate, press the intercom button and wait for a response by Receiving personnel.
- .2 Constructors will be asked to identify their company, state their purpose for entering, and indicate the estimated length of their stay.
- .3 A maximum of 30-minutes will be allowed for each transaction unless prior arrangements are made as outlined in 2.2.6, below.
- .4 Constructors shall park **only in areas designated by Receiving personnel.**
- .5 Receiving personnel are not allowed to lend equipment to Constructors.
- .6 Arrangements for any supply, materials or equipment deliveries involving subcontractors must be made 24 hours in advance with the Receiving Supervisor (395-5133). Receiving personnel will not accept deliveries.
- .7 Constructors are not permitted to use the inventory warehouse area as a pass-through to enter the Health Center. Alternate routes North and South of the warehouse area shall be used. Caution must be exercised in using the South route due to tractor-trailer traffic.
- .8 For large shipments of equipment, construction materials, furniture, etc., that cannot be handled as outlined in 2.2.7, special arrangements shall be made through the Hospital/Health Center administration to allow for operational adjustments to normal receiving patterns.
- .9 Receiving facility hours are Monday - Friday, 7:00 am to Noon, and 1:00 PM to 4:00 PM.

Questions regarding the above may be directed to the Receiving Supervisor at 395-0261 or 395-0111, ext. 52133.

### **2.3 Storage Facilities:**

Due to limited availability of on-site storage areas, the Constructor will be required to confine storage of materials for this project within the confines of the project area, or in other designated areas as authorized by the UF Project Manager. No yard storage will be available for use by the Constructor.

### **2.4 General Requirements for Constructors:**

- .1 Constructor shall designate a superintendent for each project who shall be present at the proposed work area **whenever any subcontractor, as well as any employee of the General Contractor, are working at the site.** The Constructor's superintendent shall be supplied with a mobile telephone or pager. The Superintendent's mobile telephone, pager, office and home telephone

numbers shall be supplied to the UF Project Manager to facilitate 24 hour/day emergency contact.

- .2 Access of all employees entering upon the Owner's property in connection with the Work shall be restricted to the designated access route and the actual site of the Work.
- .4 Employees shall refrain from any contact with animals housed in animal research areas or College of Veterinary Medicine facilities.
- .6 All Constructors and their Subcontractors are required to purchase a **University of Florida Picture Identification Badge** for every employee working at the project site. Picture identification badges are to be obtained from Health Center Biomedical Media Services, located in Room C3-003, on the 3rd Floor level of the Communicore Building at the J. Hillis Miller Health Center, 1600 S.W. Archer Road. Employees shall display this badge at all times when working in or at University of Florida Health Science Center facilities.

To obtain a Picture Identification Badge for each employee, Constructors and Subcontractors will need to complete a **Health Center "Vendor" Card Authorization Form**. Submittal of this form, and subsequent signature of each employee, further constitutes authorization for the Health Science Center to release the photographic image to the University Police Department for the purposes of a routine background check, per Paragraph 2.5.5, following. At the completion of the project, all picture identification badges must be returned to the Health Science Center office of U. F. Facilities Planning & Construction prior to submission of the Certificate of Contract Completion. Final payment will be withheld until such time that all badges are returned.

- .7 The Constructors shall be responsible for full compliance with the requirements of this Section by his/her Subcontractors and personnel.x7

## **2.5 Protection of Existing Facilities:**

- .1 All demolition trash and rubble shall be removed from the interior of the building in covered, rubber-tired carts. Carts shall have resilient bumpers or edges to prevent damage to walls, doors and other building finishes.
- .2 Location of dumpsters for use by the Constructor shall be coordinated with the UF Project Manager. Use of Health Science Center dumpsters is prohibited unless previously approved by the U. F. Facilities Planning & Construction Project Manager.
- .3 The Constructor shall provide and maintain necessary barriers and protective devices to control public access into work areas and to contain all work and storage areas such that adjoining facilities, including walkways, corridors, stair and doorways that must remain accessible for the Owner's use are maintained. Orange plastic visual barriers are preferred.
- .4 The use of any "air hammers" or other impact equipment that will cause excessive noise or vibration will be strictly prohibited.

- .5 The use of any gasoline-powered equipment inside the building will be strictly prohibited.
- .6 Except for special situations where prior approval from the UF Project Manager was granted, the use of power impact tools for demolition is prohibited inside the building.
- .7 The Constructor shall coordinate his work with the University of Florida class schedule, and shall schedule and carry out his work such that the normal operations of the University, the Health Science Center, and Shands Hospital are given first priority. This applies particularly to utilities outages and restriction of access. Such construction operations must frequently be carried on outside of normal working hours, and by overtime, weekend, and holiday work. It will be the Constructor's responsibility to provide for this in his bid.

**2.6 Utility Outages Inside Health Science Center Facilities:**

The Constructor shall submit a **Physical Plant Utility Outage Request** to the UF Project Manager, in advance of any anticipated utility outage that will affect the spaces within or around the project area. The Constructor shall verify with the UF Project Manager, the location for shutting down the utility services. The Request shall include the estimated duration of the outage.

- .1 Major Utility Outages: For utility outages which will affect occupied areas outside the limits of the Project area, the Utility Outage Request shall be submitted a **Minimum of 7 Days** in advance of the anticipated outage.
- .2 Minor Utility Outages: For utility outages which will affect only the spaces within the Project area, the Request shall be submitted a **Minimum of 48 Hours** in advance of the anticipated outage.

**2.7 Health Center Project Inspection Procedures:**

The Constructor shall submit to the Health Center office of U. F. Facilities Planning & Construction a **Project Inspection Request** a **Minimum of 24 Hours** in advance of the following Air Conditioning, Plumbing, Electrical, and Building Construction phases of construction insofar as they apply to the project Scope of Work:

- .1 Slab
- .2 Rough-in
- .3 Framing
- .4 Concealment
- .5 Substantial
- .6 Final

These requests for inspection may be submitted in conjunction with the requests for code compliance inspection required under the University of Florida Building Code Enforcement Program (see Section 2.9, following).

END OF SECTION

## **DIVISION 2 - SITEWORK**

### **PART 1 - DEMOLITION**

#### **1.1 GENERAL REQUIREMENTS:**

- A. Demolition, trash, and rubble shall be removed daily from the interior of buildings in covered, rubber-tired carts. Specify that the carts have resilient bumpers or edges to prevent damage to walls, doors and other building finishes.
- B. Specify that except for special situations where prior approval is received from the UF Project Manager, the use of power impact tools for demolition, as well as the use of equipment powered by gasoline or diesel fuel, is prohibited inside Health Science Center facilities.
- C. Note that the location of dumpsters for use by constructors shall be coordinated with the UF Project Manager. Note that the use of existing Health Science Center dumpsters is prohibited. The UF Project Manager may approve special written permission on the most minor of projects.
- D. For applicable buildings, project specifications shall call for restricted use of elevators by the constructor and identify protective measures to be undertaken in those elevators that are approved for vertical transportation of materials and supplies. Consult with the Health Center Physical Plant Department for specific requirements and/or restrictions on the elevators proposed for use on the project.

#### **1.2 HAZARDOUS MATERIALS:**

- A. See Part 2, following, for requirements pertaining to asbestos containing materials.
- B. DISPOSAL:
  - 1. Note in the appropriate division(s)/section(s) of the project specifications that all hazardous materials removed as part of the demolition must be disposed of by the [University Environmental Health & Safety Division](#).
  - 2. The project Constructor shall sub-contract with the [University Environmental Health & Safety Division](#) for this service. A fee schedule is available upon request (Phone 392-8400).
- C. LEAD PAINT:
  - 1. If it is proposed that existing painted surfaces are to be sanded for any reason, contact the UF Facilities Planning & Construction Health Science Center office to determine if a test of the existing paint for the presence of lead is warranted.
- D. LIGHT FIXTURES WITH LAMPS CONTAINING MERCURY AND/OR BALLASTS CONTAINING PCB'S:

1. Note in the appropriate division(s)/section(s) of the project specifications that all mercury containing lamps, as well as any ballasts that do not state that they are PCB free, must be removed from the light fixture and disposed of as hazardous waste.

E. LABORATORY HOODS:

1. Note in the project specifications that the Constructor shall ascertain that laboratory radioisotope and chemical fume hoods, and all associated duct work, have been cleared by the [University Environmental Health & Safety Division](#) as non-hazardous prior to its removal or modification.

**1.3 SALVAGE RIGHTS:**

- A. Prior to issuing 100% construction documents, review with the UF Project Manager and the Health Center Physical Plant Department what specific items of demolition shall be turned over to the Owner by the Constructor. Clearly note those items on the drawings.
- B. Specify and field verify that all locksets in doors being demolished are turned over to the Health Center Physical Plant Department Key Shop.
- C. Specify that the items to be retained by the Owner are to be removed and placed in a location adjacent to the project site, to be designated by the UF Project Manager at the pre-construction conference, and that adequate notice be provided to the UF Project Manager for arranging their pick-up.

**PART 2 - ASBESTOS**

**2.1 GENERAL REQUIREMENTS:**

- A. In many Health Science Center facilities, there are existing construction materials, which contain asbestos. Special precautions must be taken, and procedures followed, when removing or working around these materials.
- B. Prior to the start of project design, the Architect/Engineer shall consult with the UF Facilities Planning & Construction Health Science Center office to determine known locations of asbestos-containing materials and, if present within the limits of proposed project construction, how these materials will be dealt with.
- C. PROJECT DOCUMENT REQUIREMENTS:
  1. The project documents shall include specifications for the removal of all asbestos-containing materials, and/or procedures ("work plan") for all work near and around friable asbestos-containing materials.
  2. The specifications or work plan shall be prepared by a licensed Asbestos Abatement Consulting Engineer. In most cases the UF Facilities Planning & Construction Health Science Center office will independently arrange for the preparation of these documents, and will provide them to

the Architect/Engineer for inclusion as part of the overall project documents.

3. The Architect/Engineer shall also provide caution statements in the appropriate sections of the project drawings and specifications, alerting the constructor and subcontractors to the presence of asbestos, and referring them to the asbestos abatement specifications and/or work plan.

## **2.2 MATERIALS AND LOCATIONS:**

### **A. ASBESTOS-CONTAINING STRUCTURAL STEEL FIREPROOFING:**

1. This material is present throughout the Dental Science Building No. 205, General Service Building No. 204 and Communicore Building No. 203. It is sprayed on structural steel beams, columns and metal floor decking.
2. Fireproofing "over-spray" will also be found on adjacent building materials and systems, and loose material will very likely be found inside wall cavities and chases.
3. Many areas of the above referenced buildings have been abated of asbestos. Prior to starting project design, consult with the UF Project Manager to determine if the project areas, or adjacent areas, still contain asbestos.

### **B. ASBESTOS PIPE INSULATION:**

1. This material will primarily be found on steam piping, heating hot water piping, and on boilers in pre-1970 buildings, such as but not limited to the Medical Science Building & Pharmacy Wing.

### **C. VINYL ASBESTOS FLOOR TILE, SHEET VINYL BACKING AND ASBESTOS-CONTAINING MASTIC:**

1. May be found in any of the pre-1990 buildings. For removal of vinyl asbestos floor tile and sheet vinyl, consult with the University Environmental Health & Safety Division for the proper procedures to be specified.

### **D. TRANSITE:**

1. When applicable, include as a cautionary statement in the project specifications that Transite panels inside chemical fume hoods, as well as the insulation applied to the bottom of resin laboratory sinks, contains asbestos and requires special disposal procedures.

**END OF SECTION**

**DIVISION 5 - METALS**

**PART 1 - METAL STUD WALLS**

**1.1 EXISTING METAL STUD WALLS:**

- A. Note that original construction metal wall studs in the Dental Science Building No. 205, General Service Building No. 204 and Communicore Building No. 203 are, in most places, a full 4" width.
- B. Verify for project design to infill openings, matching wall thickness, and for specifying door and window frames.

**END OF SECTION**

**DIVISION 8 – DOORS AND WINDOWS****PART 1 – DOORS**

- A. AUTOMATIC DOOR OPENERS: Acceptable manufacturers/models are: Besam Electro/Hydraulic Power Swing (preferred) or LCN 4630 or LCN 4640 Electro/Hydraulic.

Note: Pneumatic door operators are not to be used.

**PART 2 – DOOR HARDWARE****1.1 CYLINDERS:**

- A. Specify only Corbin/Russwin cylinders.
- B. Cylinders, either six (6) or seven (7) pin, shall be a specific keyway to match existing GGM key system of the Health Science Center. Verify with the Health Science Center Physical Plant Department Locksmith which system to specify for the project area.
- C. Bitting information will be provided by the Health Center Physical Plant Department through the Health Center Projects Coordinator.

**1.2 KEYING:**

- A. On Minor Projects (up to \$1,000,000), keying will be accomplished by the Health Center Physical Plant Department. Specify that the Constructor deliver cylinders and 3 blank keys to the Health Center Projects Coordinator for keying and installation by the Health Center Physical Plant Department.
- B. On Major Projects (\$1,000,000 and greater), the Constructor shall provide the keying. The exceptions would be existing facility remodeling and small new buildings, with the approval of the Health Center Physical Plant Department during the Design Development Phase, under which Paragraph A., above, would apply.

**1.3 SECURITY LOCKSETS:**

- A. In Health Science Center facilities, keypad mortise locks shall be Locknetics Schlage Pro Series #PRO5596- (select model)-17-(specify hand)-LC-626-SLB.

**1.4 CONCEALED RODS:**

- A. Due to the high volume of cart traffic at the Health Science Center, all doors will have concealed vertical rods.

END OF SECTION

**DIVISION 9 – FINISHES****PART 1 – GENERAL****1.1 SCOPE OF SECTION:**

This section contains the requirements relating to finishes in Health Science Center facilities.

**PART 2 - WALLS****2.1 GENERAL REQUIREMENTS:**

- A. Include sufficient details on project drawings to instruct the Constructor as to new and existing wall heights, fire ratings and the sealing of penetrations through the walls.

**2.2 WALL COVERINGS:**

- A. The use of wall coverings is discouraged due to the problems with maintenance and upkeep over a period of time.
- B. All vinyl wall covering shall be in 54" wide rolls and a minimum Type-2, Class "A", 21 oz. weight, **perforated.**

**PART 3 – FLOORING:****3.1** The following are the floor finish standards for the referenced Health Science Center facilities:

- A. COMMUNICORE BUILDING NO. 203:
  - 1. Utilize Azrock "Custom Cortina" #V-862 Cloud White vinyl composition tiles except in areas to receive an upgraded finish or where there is a small area to be patched to match existing.
- B. DENTAL SCIENCE BUILDING NO. 205:
  - 1. Utilize Azrock "Custom Cortina" #V-862 Cloud White vinyl composition tiles except in areas to receive an upgraded finish or where there is a small area to be patched to match existing.
- C. McKNIGHT BRAIN INSTITUTE (U.F. BUILDING NO. 0072):
  - 1. Vinyl composition tiles utilized in this building are: Tarkett "Basic Structures" #6414 White/Steel/Dawn, "Basic Structures" # 6444 Smoked Grey/White/Black, "Keystones" #4452 Teal Security and "Keystones" #3837 Dignified Black. The above listed vinyl tiles by Tarkett are no

longer being manufactured. Therefore, a similar color matched tile by Azrock is an acceptable substitute upon approval by Project Manager.

2. Sheet vinyl utilized in areas requiring a seamless floor finish is: Azrock "Mipolam" Antistatic #5030 Grey Chip Pattern.

D. VETERINARY MEDICINE ACADEMIC WING (U.F. BUILDING NO. 1017):

1. Vinyl composition tiles utilized in this building are Tarkett "Basic Structures" #6414 White/Steel/Dawn and #6434 Dawn Grey/White/Black, Tarkett "Classics" #3018 Black/White and, Tarkett "Premium" #4849 Burgundy.

## PART 4 - INTERIOR PAINTING

### 4.1 GENERAL REQUIREMENTS:

- A. All interior painting within University of Florida Health Science Center facilities shall be based on the use of Pittsburgh paint colors and products, except where noted. Products by other major manufacturers may be utilized provided that they are of equal quality, are formulated for the intended application, and provide an exact color match with the Health Center standard colors identified in this Section.

### 4.2 PREPARATION OF SURFACES:

- A. PRIMERS: Surfaces shall be primed with the following products **or as shown on paint schedule**:
  1. New drywall / plaster surfaces:  
For Latex Painting - PPG 6-2 Latex Quick Dry Sealer  
For Oil Painting - PPG 6-6 Quick Dry Oil Base Enamel  
For Wall Papering - the product recommended by the vinyl wall-covering manufacturer.
  2. Existing drywall / plaster surfaces:  
With Alkyd Build-Up - PPG 6-3 Alkali Resistant Primer
  3. New concrete block surfaces:  
PPG 6-7 Block Filler
  4. Wood surfaces:  
To Be Painted - PPG 6-6 Quick Dry Oil Base Enamel  
Natural Finish - Sherwin Williams or USA First & Second Coat Sand and Finish Sealer (2 coats)
  5. Metal surfaces:  
Corrosion Inhibiter - Skyco OSPHO  
Primer - PPG 6-212 Rust Inhibitive Steel Primer

#### 4.3 PAINTING AND FINISHING OF SURFACES:

##### A. PAINT COLORS:

1. The following Paint Colors have been established as Health Science Center standards and shall be utilized on all projects, except as noted:
  - a.) Wall Paint – Pittsburgh 6-500 Semi Gloss
    - PPG #520-2 Willow Springs
    - PPG #414-1 Colonial White
    - PPG #555-3 Tinsel
    - PPG #552-4 Chambray
  - b.) Trim / Accent Paint – Coronado Rust Scat 90 Series Semi Gloss
    - PPG #550-6 Canyon Blue
    - PPG #324-4 Orange Maple
    - PPG #554-4 Smoke Screen
2. All color schemes in existing buildings shall be maintained unless a change is approved or directed by ~~the Health Center office of~~ UF Facilities Planning & Construction.
3. A schedule of standard paint colors, by building; to be utilized in public corridors and spaces is available from ~~the Health Science Center office of~~ UF Facilities Planning & Construction.

##### B. PAINT SCHEDULE:

1. Pits
  - Latex Semi Gloss Finish - Low Odor -Low VOC:
  - PPG Industries, Pittsburgh Paints (Design Standard)
  - 1st Coat: SPEEDHIDE® Int./Ext. Acrylic Masonry Block Filler 6-15.  
(50-100 sq. ft/gal)
  - 2nd Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-500 Series.
  - 3rd Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-500 Series. (4.6 mils wet, 1.7 mils dry per coat)
2. Concrete Masonry Units (CMU)
  - Latex Semi-Gloss Finish - Low Odor -Low VOC:
  - PPG Industries, Pittsburgh Paints (Design Standard)
  - 1st Coat: PPG PURE PERFORMANCE Interior Latex Primer 9-900.

2nd Coat: PPG PURE PERFORMANCE Interior Eggshell Latex 9-300 Series.

3rd Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-300 Series. (4.0 mils wet, 1.5 mils dry per coat)

3. Concrete Masonry Units (CMU)

Epoxy (Water Base) Semi Gloss Finish:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG PITT-GLAZE®Interior/Exterior Block Filler Latex 16-90. (64-138 sq. ft/gal 6-13 mils dry)

2nd Coat: PPG Pitt-Glaze WB Water Borne Acrylic Epoxy 16-551 Series.

3rd Coat: PPG Pitt-Glaze WB Water Borne Acrylic Epoxy 16-551 Series. (8.2 mils wet, 3.0 mils dry per coat)

4. Concrete Masonry Units (CMU)

High Build Epoxy (Solvent Base) Gloss Finish: Squeegee a base coat after applying with spray or roller. CMU surface shall be pinhole free before applying intermediate and finish coats.

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG Cementitious Waterproofing Block Filler 95-217. (60-80 mils DFT)

2nd Coat: PPG Cementitious Waterproofing Block Filler 95-217. (60-80 mils DFT).

3rd Coat: PPG Pitt-Guard Rapid Coat D-T-R Epoxy Coating 95-245 Series (4-7 mils DFT) roller applied.

4th Coat: PPG Pitthane Ultra Gloss Urethane Enamel 95-812 Series. (2-3 mils DFT) roller applied.

5. Metal-Aluminum

Latex Semi Gloss Finish - Low Odor -Low VOC:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-500 Series.

2nd Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-500 Series. (4.6 mils wet, 1.7 mils dry per coat)

6. Metal-Aluminum

Latex Eggshell Finish-Low Odor-Low VOC:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG PURE PERFORMANCE Interior Eggshell Latex 9-300 Series.

2nd Coat: PPG PURE PERFORMANCE Interior Eggshell Latex 9-300 Series. (4.0 mils wet, 1.5 mils dry per coat)

7. Metal-Aluminum

Epoxy (Water Base) Semi Gloss Finish:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG Pitt-Glaze WB Water Borne Acrylic Epoxy 16-551 Series.  
2nd Coat: PPG Pitt-Glaze WB Water Borne Acrylic Epoxy 16-551 Series.  
(8.2 mils wet, 3.0 mils dry per coat)

8. Metal-Galvanized

Latex Semi Gloss Finish - Low Odor -Low VOC:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG Pitt-Tech Int/Ext Industrial DTM Primer/Finish Enamel 90-712 Series. (7.7 mils wet, 3.0 mils dry).  
2nd Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-500 Series.  
3rd Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-500 Series. (4.6 mils wet, 1.7 mils dry per coat)

9. Metal-Galvanized

Epoxy (Water Base) Semi Gloss Finish:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG Pitt-Glaze WB Water Borne Acrylic Epoxy 16-551 Series.  
2nd Coat: PPG Pitt-Glaze WB Water Borne Acrylic Epoxy 16-551 Series.  
(8.2 mils wet, 3.0 mils dry per coat)

10. Metal-Shop Primed

Latex Semi Gloss Finish:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG Pitt-Tech Int/Ext Industrial DTM Primer/Finish Enamel 90-712 Series. (7.7 mils wet, 3.0 mils dry).  
2nd Coat: PPG Speedhide Interior Semi Gloss Acrylic Latex 6-500 Series.  
3rd Coat: PPG Speedhide Interior Semi Gloss Acrylic Latex 6-500 Series. (4.6 mils wet, 1.7 mils dry per coat)

11. Metal-Shop Primed

Epoxy (Water Base) Semi Gloss Finish:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG Aquapon WB Waterborne Epoxy Primer 98-46. (8.4 mils wet, 3.0 mils dry)  
2nd Coat: PPG Pitt-Glaze WB Water Borne Acrylic Epoxy 16-551 Series.

3rd Coat: PPG Pitt-Glaze WB Water Borne Acrylic Epoxy 16-551 Series.  
(8.2 mils wet, 3.0 mils dry per coat)

12. Metal-Ceilings: Structural Steel, Joists, Trusses, Beams:

Drywall Waterborne Semi Gloss Finish:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG Pitt-Tech Int/Ext Industrial DTM Primer/Finish Enamel 90-712 Series. (7.7 mils wet, 3.0 mils dry).

2nd Coat: PPG SPEEDHIDE® Interior Spray Paint Semi-Gloss Latex 6-714XI. (6.4-8.0 mils wet, 2.0-3.2 mils dry)

13. Wood - Doors, Trim, Cabinet Work

Latex Semi Gloss Finish -Low Odor, Low VOC:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG PURE PERFORMANCE Interior Latex Primer 9-900.

2nd Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-500 Series.

3rd Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-500 Series.

(4.6 mils wet, 1.7 mils dry per coat))

14. Wood - Doors, Trim, Cabinet Work

Stain and Varnish (Clear Finish)-Open Grain Wood:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: Filler not required.

2nd Coat: PPG REZ Interior Stain Semi-Transparent Oil 77-560.

3rd Coat: PPG REZ Interior Acrylic Polyurethane Gloss Clear Finish 77-45 or PPG REZ Interior Acrylic Polyurethane Satin Clear Finish 77-49.

4th Coat: PPG REZ Interior Acrylic Polyurethane Gloss Clear Finish 77-45 or PPG REZ Interior Acrylic Polyurethane Satin Clear Finish 77-49.

15. Wood - Doors, Trim, Cabinet Work

Stain and Varnish (Clear Finish)-Closed Grain Wood:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG REZ Interior Stain Semi-Transparent Oil 77-560.

2nd Coat: PPG REZ Interior Acrylic Polyurethane Gloss Clear Finish 77-45 or PPG REZ Interior Acrylic Polyurethane Satin Clear Finish 77-49.

3rd Coat: PPG REZ Interior Acrylic Polyurethane Gloss Clear Finish 77-45 or PPG REZ Interior Acrylic Polyurethane Satin Clear Finish 77-49.

16. Gypsum Board

Latex Semi-Gloss Finish-Low Odor-Low VOC:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG PURE PERFORMANCE Interior Latex Primer 9-900.

2nd Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-500 Series.

3rd Coat: PPG PURE PERFORMANCE Interior Semi-Gloss Latex 9-500 Series. (4.6 mils wet, 1.7 mils dry per coat)

17. Gypsum Board

Latex Eggshell Finish -Low Odor, Low VOC:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG PURE PERFORMANCE Interior Latex Primer 9-900.

2nd Coat: PPG PURE PERFORMANCE Interior Eggshell Latex 9-300 Series.

3rd Coat: PPG PURE PERFORMANCE Interior Eggshell Latex 9-300 Series.

(4.0 mils wet, 1.5 mils dry per coat))

Note: Not for use in corridors.

18. Gypsum Board

High Build Epoxy (Solvent Base) Gloss Finish: Surface shall be pinhole free.

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG Speedhide Interior Latex Primer Sealer 6-2. (4.5 mils wet, 1.3 mils dry)

2nd Coat: PPG Pitt-Guard Rapid Coat D-T-R Epoxy Coating 95-245 Series. (4-7 mils DFT) roller applied.

3rd Coat: PPG Pitthane Ultra Gloss Urethane Enamel 95-812 Series. (2-3 mils DFT) roller applied.

19. Canvas- Wall Covering, Pipe Wrapping

Latex Finish:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG Speedhide Interior Latex Primer Sealer 6-2. (4.5 mils wet, 1.3 mils dry)

2nd Coat: PPG Speedhide Interior Semi Gloss 6-70 Series. (4.0 mils wet, 1.3 mils dry).

20. Heat Resistant Coatings

Oleoresinous-Max. Temperature 400 Degrees F, Aluminum Finish:

PPG Industries, Pittsburgh Paints (Design Standard)

1st Coat: PPG Speedhide Int/Ext Aluminum Paint 6-230.  
2nd Coat: PPG Speedhide Int/Ext Aluminum Paint 6-230.  
(3.2 mils wet, 1.5 mils dry per coat)

21. Heat Resistant Coatings

Oleoresinous-Max. Temperature 400 to 700 Degrees F, Aluminum Finish  
(Interior use only):

PPG Industries, Pittsburgh Paints (Design Standard)  
1st Coat: PPG Speedhide Int/Ext Aluminum Paint 6-220.  
2nd Coat: PPG Speedhide Int/Ext Aluminum Paint 6-220.  
(6.7 mils wet, 1.5 mils dry per coat)

22. Pipe Identification

Latex Gloss Finish:

PPG Industries, Pittsburgh Paints (Design Standard)  
1st Coat: PPG Pitt-Tech Int/Ext Industrial DTM Primer/Finish Enamel 90-712 Series. (7.7 mils wet, 3.0 mils dry)  
2nd Coat: PPG Pitt-Tech Int/Ext High Gloss DTM Industrial Enamel 90-374 Series.  
3rd Coat: PPG Pitt-Tech Int/Ext High Gloss DTM Industrial Enamel 90-374 Series. (8.3 mils wet, 3.0 mils dry per coat).

23. Pipe Identification

Latex Semi Gloss Finish:

PPG Industries, Pittsburgh Paints (Design Standard)  
1st Coat: PPG Pitt-Tech Int/Ext Industrial DTM Primer/Finish Enamel 90-712 Series. (7.7 mils wet, 3.0 mils dry)  
2nd Coat: PPG Int/Ext Semi-gloss Acrylic Latex Metal Finish 7-374 Series.  
3rd Coat: PPG Int/Ext Semi-gloss Acrylic Latex Metal Finish 7-374 Series. (5.9 mils wet, 2.0 mils dry per coat).

24. Tele/Data Rooms

Semi Gloss Finish (intumescent fire retardant paint):

Primer on plywood panelboards: SEAL GRIP® Interior Alkyd Enamel Undercoater 17-956.  
Primer on metal: PPG Pitt-Tech Int/Ext Industrial DTM Primer/Finish Enamel 90-712 Series.  
1st Coat: PPG Speedhide Interior Fire Retardant Semi Gloss Latex.  
2nd Coat: PPG Speedhide Interior Fire Retardant Semi Gloss Latex.

Note: Do not paint over fire rating, UL or other permananet labels.

END OF SECTION

## DIVISION 10 - SPECIALTIES

### PART 1 - VISUAL DISPLAY BOARDS

#### 1.1 TACKBOARDS:

##### A. GENERAL REQUIREMENTS:

1. The type of tack board to be utilized in Health Science Center facilities, and the location for mounting, shall be approved by UF Facilities Planning & Construction Management.

### PART 2 - WALL ACCESSORIES

#### 2.1 CORNER GUARDS:

- A. Specify minimum 2" wide, 48" high corner guards in all public spaces and spaces with rolling cart traffic.

### PART 3 - MOVEABLE PARTITIONS

#### 3.1 GENERAL REQUIREMENTS:

- A. The layout of all proposed moveable office partitions, along with the associated furniture placement, shall be submitted to UF Facilities Planning & Construction at the Schematic Design Phase for verification of compliance with the Florida Accessibility Code, and with Life Safety and Fire Codes.
- B. Specify only moveable partitions that are pre-wired for electrical service and with dual chase raceways.
- C. Where moveable partitions do not abut a wall, provide a dual chase "power pole" for electrical and telecommunications service. Do not plan for or specify the use of in-floor electrical and telecommunications outlets or extension cords.
- D. Where moveable partition systems include doors, the locksets on the doors shall accept and be provided with, Corbin/Ruswin cylinders as specified under Section 8700 of the *UF Design and Construction Standards*.

### PART 4 - TOILET AND BATH ACCESSORIES

#### 4.1 GENERAL REQUIREMENTS:

- A. For all projects involving the renovation, remodeling or construction of new public restroom facilities, the Health Center Building Services Department will provide the Constructor with the following accessories, at no charge, for installation under construction contract:
  1. Paper Towel Dispenser
  2. Toilet Paper Holder
  3. Soap Dispenser

- B. Toilet accessories should be surface mounted. Avoid recessed fixtures.

END OF SECTION

## **DIVISION 12 - FURNISHINGS**

### **PART 1 – LABORATORY CASEWORK**

#### **1.1 REQUIREMENTS BY BUILDING:**

- A. ACADEMIC RESEARCH BUILDING (UF Building No. 201):
  - 1. All laboratory casework and accessories specified and/or to be installed in the Academic Research Building shall match existing, which is a custom "C" frame installation.
- B. McKNIGHT BRAIN INSTITUTE (UF Building No. 59):
  - 1. All laboratory casework and accessories specified and/or to be installed in the McKnight Brain Institute, Building, shall match the existing produced by Fisher Hamilton Scientific, Inc.
- C. VETERINARY MEDICINE ACADEMIC WING (UF Building No. 1017):
  - 1. All laboratory casework and accessories specified and/or to be installed in the College of Veterinary Medicine Academic Wing shall match the existing produced by Fisher Hamilton Scientific, Inc.

### **PART 2 – WINDOW TREATMENT**

#### **2.1 PRODUCTS:**

- A. When specifying window treatment as part of a project in the Medical Science Building and Pharmacy Wing (U.F. Building No. 445), specify only Graber Brighton "Silver Lining" #4260 Vertical Blinds. The intent is to maintain a uniform appearance as viewed from the exterior of the building.

**END OF SECTION**

## **DIVISION 14 – CONVEYING SYSTEMS**

### **PART 1 - ELEVATORS**

- A. All buildings having emergency power shall have at least one elevator out of each cluster of elevators on emergency power and operable at the time of initial inspection by State Elevator Inspector. In buildings that don't have emergency power there shall be a battery backup system installed to allow an elevator to be run to the safest floor for emergency egress in case of a power outage or to have both emergency power and battery backup.

Refer to the Florida Building Code 2001 Chapter 30 section 30003.4.2, Elevator accessibility requirements for the physically handicapped. (C)

Refer to Florida Building Code 2001 Chapter 30 section 3003.5, Standby Power.

**END OF SECTION**

## **DIVISION 15 - MECHANICAL**

### **PART 1 - VALVES**

#### **1.1 STEAM:**

- A. Utilize steam rated ball valves for piping 2" and below.

#### **1.2 EQUIPMENT COOLING:**

- A. Domestic potable water shall be used as a single pass redundant cooling agent for emergency purposes on all cold room condensing units using chilled water as the primary cooling agent and to include the use of Switch Over Valves to change over from chilled water to domestic water in case there is a lack of chilled water supply to the units to continue to provide the proper heat transfer. Air conditioning units serving critical needs using DX Systems for primary cooling with water cooled condensers using chilled water as the primary condensing source shall be required to use domestic potable water as a redundant condensing source on a case by case basis with the discretion of HSC-PPD.

#### **1.3 MIXING VALVES**

- A. Provide check valves on hot and cold water piping anywhere a mixing valve is installed.

#### **1.4 FAUCETS**

- A. All restroom renovations will specify Chicago, Delta, or T&S brand faucets. When automatic sensor faucets are desired, use Sloan "Optima" model EAF-150-ISM.

### **PART 2 – HVAC SEQUENCE OF OPERATIONS**

#### **1.1 GENERAL:**

- A. Refer to the "UF Control Systems Guide Specifications" standards document for guidelines and requirements of control system operational requirements. Refer to [www.ppd.ufl.edu/systems-controls.html](http://www.ppd.ufl.edu/systems-controls.html) for the requirements.

### **PART 3 – HVAC Air Handlers**

#### **1.1 Air Handler Units:**

- A. All air handlers located in Health Science Center facilities will be mounted on pedestal-type supports with vibration absorption springs. The units will be eighteen inches from the finished floor. If this is not feasible due to ceiling height, a minimum of twelve inches is acceptable.

**END OF SECTION**

**DIVISION 16 - PLUMBING****PART 1 – PLUMBING PIPING****1.1 DOMESTIC WATER (INSIDE BUILDING):**

- A. **PIPING & SOLDERED FITTINGS:** Copper tube Type L soldered to wrought copper or cast bronze fittings. Solder joints shall be provided with a lead free material approved by NSF (National Sanitation Foundation) and in compliance with ANSI 61 suitable for domestic water systems. Solder paste shall be non-toxic water-based approved by NSF for use in domestic water systems. Solder paste shall be suitable for solder based filler material used. Acid flux is prohibited. Uses of solder materials not approved by the NSF and not in compliance with ANSI 61 are prohibited and are not acceptable.
- B. **COPPER & COPPER ALLOY NON-SOLDER TYPE FITTINGS:** Shall be the product of a single manufacturer and approved for its specific application. Fittings, valves and couplings must be consistent throughout with no mismatching of manufacturers. ½ inch thru 4 inch copper and copper alloy press seal fittings compliant with ANSI/ICC 1002 and NSF/ANSI 61-G if used in a potable water application. Sealing elements shall be EPDM, FKM, or HNBR and shall be verified for the intended use.
- C. **STAINLESS STEEL TYPE 304 OR 316 NON-SOLDER FITTING SYSTEMS:** Shall be the product of a single manufacturer and approved for its specific application. Fittings, valves and couplings must be consistent throughout with no mismatching of manufacturers. ½ inch thru 4 inch stainless steel pipe compliant with ASTM A312 or ASTM A554 and shall be copper tube sized (CTS). Stainless steel non-solder fittings shall have the CTS sizing designation. Sealing elements shall be EPDM, FKM, or HNBR and shall be verified for the intended use.

END OF SECTION