DIVISION 10 - SPECIALTIES

10.01 CHALK BOARDS AND TACK BOARDS

A. Chalkboards and tackboards must comply with UMCP Design Standards for Instructional Spaces in Division 12.

B. Provide one (1) bulletin board outside each classroom.

1. Model: Claridge #958-W 4' x 4', or approved equal
   Claridge #962-W 4' x 8', or approved equal
   Hardwood Frame - 1-3/4"

2. Color: #2100 - NuTAN or approved equal.
Currently, the UMCP standard sign is to be of the shape, size, and material as specified in the detail drawing. The cast aluminum letters presented are for special building names and are to be used when appropriate and as directed on a project-by-project basis.

1. EXTERIOR SIGN STANDARD

   A. Signs are to be installed at main entrance(s) to building at aesthetically appropriate height and to latch side of single door or preferred side of multidoor entry. Location and height to be determined by architect, Project manager, and/or UMCP-facilities management sign shop. Sign(s) are to be used to supplement the architectural prismatic, cast bronze or anodized aluminum raised letters required by university standard at main entrance -- on pediment where applicable, over door(s) where not.

   B. Exterior Building Sign Specification

   1. Sign is to be 48” x 30” or proportional reduction when limited by design.
   2. Sign is to be oriented horizontally.
   3. Sign is to be fabricated out of .080 gauge aluminum white
   4. All corners are be radiuses at 4”
   5. Font is to be Bembo MT Pro Regular or trade equivalent at 6” character height for text. Height may vary pending length of name. Font is to be used at 100% width and auto kerned. Text is to be designation (building, hall, laboratory, etc.) followed by the building number font is Univers 55 Bold and centered.
   6. All applied graphics are to be of black 2 MIL. High performance vinyl film rated at a minimum 7-year survivable exposure. Vinyl films are available from any sign/graphic supplier. An acceptable brand is:
      Avery A9130 – Medium Yellow
      Avery A9345 – Fire Red
      Avery A9090 – Black
   7. Provide a 1⁄2” thick continuous black border around perimeter of the sign, and cut out of above specified vinyl film.
   8. Signs are to be installed using ¼” x 20TPI canal resistant stainless steel machine screws. Screws are to be set in double expansion lead shields at four corners.
2. INSTALLATION SPECIFICATIONS: BUILDING IDENTIFICATION

A. Raised letters at main entrance

B. Location and mounting techniques to be determined at time of installation

C. Style: Architectural Prismatic

D. Letter size and spacing: As determined by architectural design

E. Construction: cast aluminum with belt satin finish

F. Finish: Anodized dark bronze or black satin
PART I - GENERAL

1.1 All requirements of the State of Maryland and Office of the State Fire Marshal shall apply to the specifications and design requirements, including the following:
   A. NFPA National Fire Prevention Code (NFPA 1)
   B. Underwriters Laboratories Inc. (UL), Fire Protection Equipment List
   C. Maryland Occupational Safety and Health Act
   D. National Fire Protection Association (NFPA) 10, Standard for the Installation, Maintenance and Use of Portable Fire Extinguishers (latest edition)

PART II - PRODUCTS

2.1 All dry chemical ("ABC") extinguishers shall be: Multi purpose dry chemical stored pressured fire extinguishers, steel cylinder (12 year hydrostatic test interval), all metal valve, handle and syphon tube assembly, readable pressure gauge, red in color, rechargeable, and flexible discharge hose.

   1) 10 lb size: U.L. Rating 4A-60B:C, Amerex Model #441 or approved equal shall be installed in all areas unless specifically specified.

   2) 5 lb size: U.L. Rating 2A-40B:C, Amerex Model #424 or approved equal shall be installed in all lab areas.

2.2 All dry Chemical ("BC"). Class "BC" purpose potassium bicarbonate (Purple K) stored pressure fire extinguishers, steel cylinder (12 year hydrostatic test interval), all metal valve, handle and syphon tube assembly, readable pressure gauge, red in color, rechargeable, and flexible discharge hose.

   1) 10 lb size: U.L. Rating 80B:C, Amerex Model #460 or approved equal shall be installed in all commercial kitchen areas.

2.3 Halon. Halon fire extinguishers will not be permitted.

2.4 FIRE EXTINGUISHER CABINETS: All fire extinguishers
located in areas accessible to the public (ie. corridors, lobbies, public assembly areas and open office areas) shall be placed in a fire extinguisher cabinet.

A. Fire extinguisher cabinets for recessed indoor installations:

1) Cabinets shall be 18 gauge steel, red baked enamel with red trim mounted in a semi-recessed position. Larsens Model #2712 or approved equal.

2) Cabinet doors shall be 18 gauge red steel, mounted on continuous piano hinges. The door shall be provided with a tamper-proof lock, two keys, with break away acrylic panel. When the panel is broken, the cabinet door shall be opened from the inside by tripping the door lever. Larsens Door Style with lock and "Break-A-Way acrylic panel" or approved equal.

3) Cabinet trim shall be 18 gauge red steel or painted red under the painting division. The return trim for the semi-recessed mounting shall not be less than 1¼ inches. Larsens Semi-recessed type suffix "RK, RL, or RM."

4) The minimum interior dimensions shall be 12 inches in width, 27 inches in height, and 8 inches in depth. Larsens Model #2712 or approved equal.

5) Cabinet key shall be CH751

B. Fire Extinguisher Cabinets for surface mounted locations and exterior areas.

1) Cabinets shall be weather resistant 20 gauge, white or red baked enamel aluminum with break away acrylic panel front with pull handle and aluminum locking bar. Lock shall be tamper proof and supplied with 2 keys. White cabinets shall be lettered in red with the words "FIRE EXTINGUISHER" Larsen's Model #AL 2410 with Break-A-Way acrylic panel or approved equal.

2) Minimum interior dimensions shall be 10 inches in width, 24 inches in height, and 6 inches in depth.
3) Lock key shall be CH751

2.5 MISCELLANEOUS ACCESSORIES

A. Wall Mounting Hangers shall be Amerex Model #1007 or approved equal.

B. Indicating Signs for areas where fire extinguishers will not be readily visible (ie. warehouses, shop areas, large laboratories) shall be red in color with red letters printed inside a white arrow with the word FIRE printed horizontally on top and the word EXTINGUISHER printed vertically below, 4 inches by 18 inches, flexible vinyl with adhesive backing. Seton Model #37809 or approved equal.

PART III - EXECUTION FIRE EXTINGUISHER CABINETS

3.1 Fire extinguisher cabinets shall be provided in sufficient number and location but shall not exceed the minimum requirements of NFPA Standard 10.

3.2 Where construction does not allow the installation of recessed cabinets (penthouses, mechanical rooms, etc.), surface mounted cabinets shall be specified. Surface mounted cabinets shall meet the requirements of II-B above, except that they shall be surface mounted type. Larsen's Model 2409SMSM or approved equal).

3.3 Cabinets are not required in labs areas, shop areas, and any other area as approved by the University. Fire extinguishers not placed in cabinets shall be mounted on hangers as specified in Section 2.3 of this Specification and as indicated in NFPA 10.
The design shall include an identification and directional system to communicate information essential to the operation of the new facility. The interior/exterior graphic system is to assist individuals moving to and within the facility. Particular attention must be given to the needs of individuals with disabilities to permit their access to the building from parking areas and walkways and to move freely throughout the building.

It is imperative that the interior graphic system meets critical maintenance, replacement, and anti-vandalism specifications with regard to location and method of application, as well as design specifications for material, color, texture, dimensions, and letter type (reference sign detail, pages 8-9). These requirements also apply to painted wall graphics.

The development of the interior signage system and all supplementary graphics specific to the project shall be coordinated with the Project Manager. The specific room numbering assignments are to be conducted by Facilities Planning at the completion of the Schematic Design Phase. All rooms shall be numbered on the drawings using the University room numbering standard.

The design is to be in accordance with the following references:

A. Interior Room Numbering Standard

In order to properly identify rooms, assign space and maintain a computerized space inventory and key control, the following room numbering and identification system is in use at the College Park Campus.
1. Each floor within a building is to be assigned a group of 4-digit numbers. The first digit will indicate the floor of the building, the second will indicate the wing, and third and fourth will indicate the room number in that wing.

2. The four digit number may have an alpha prefix indicating a sub-basement (SB0123), basement (B0123) or mezzanine (M1123), or an alpha suffix indicating a part of one room or space (1123A).

3. Small rectangular buildings will be numbered using 4-digits, where the first digit will indicate the floor, the last two digits shall indicate the room number and the second digit shall be "one".
4. Each room entered from a public corridor will have a separate room number. Room Numbering shall read with even numbered rooms on one side of the public corridor and odd numbered rooms on the opposite side. (See figure 2.) Rooms with more than one door opening into the public corridor shall have the same number plate. Where spaces are not entered from a public corridor, but from another space, they will be assigned the same room number with an alpha suffix. Room number suffixes shall be assigned in a clockwise direction. If the spaces begin only to the right of that spaces entrance then alpha suffixes shall be assigned in a counterclockwise direction. Note: In the alpha suffix system, letters "I" and "O" are not assigned. When the letter "Z" is passed, continue with AA, BB, etc.

5. The room numbering system must be flexible enough to accommodate physical changes which may occur during the life of the building. The most frequent changes will be the subdivision of larger rooms into smaller rooms. In cases where long rooms run parallel with the corridor, a block of numbers will be reserved so
that if future subdivisions do occur, numbers will be available for the spaces without renumbering the entire wing.

6. The numbering system should reflect a general location within the building. This can be done most easily by "stacking" room numbers as much as possible. For instance, room 1101 should be in the same relative position in the building as room 2101 and 3101.

7. All public corridors, lobbies, elevators, lifts, and stairways will be numbered starting from 99 and going down, i.e., 1199, 1198, 1197, 1196, etc. (See FIGURE 3.)

FIGURE 3.

B. Identification System

1. All building support areas will be marked with a sign identifying its room use. Building support
areas include: mechanical, electrical, elevator and telephone equipment rooms, custodial closets, and toilets.

a. For these support spaces all drawings are to reflect the following abbreviations:

- Mechanical equipment rooms - ME
- Electrical rooms, transformer vaults - EE
- Elevator machinery - X
- Telephone equipment - TE
- Custodial closets - CU
- Men's Rooms - MT
- Women's Rooms - WT
- Unisex/Family Restroom - UT
- Bathroom - T

b. All signage for these spaces will be worded as follows to provide uniformity:

- Mechanical equipment rooms - "MECHANICAL EQUIPMENT"
- Electrical rooms, transformer vaults - "ELECTRICAL EQUIPMENT"
- Elevator machinery - "ELEVATOR EQUIPMENT"
- Telephone equipment - "TELEPHONE EQUIPMENT"
- Custodial closets - "CUSTODIAL"
- Men's Rooms - "MEN"
- Women's Rooms - "WOMEN"
- Unisex/Family Restroom - “UNISEX/FAMILY”
- Bathroom - "RESTROOM"

C. Assignment of Room Numbers to New Buildings

Design drawings shall incorporate room numbering in accordance with the UM Room Numbering Standard identified above. Before working drawings are completed, the doors that are scheduled to have room # plates and/or room i.d. signs shall be identified.

At the completion of construction, all "As Built" floor plans (architectural, mechanical, electrical, and structural) shall reflect the room numbers as installed by the contractor.
D. Assignment of Room Numbers for Renovation Projects

Before any renovation begins, Facilities Planning will mark room numbers on two (2) set of plans in accordance with the Standard Room Numbering and Room Identification System, indicating what room numbers and room identification sign are required. One set will be used to incorporate the information on the working drawings, and the second set will be distributed to Facilities Management O&M Building Security.

At the completion of the renovation, "As Built" drawings, verifying work done and installation of the required room number plates and room identification signs shall be prepared.

The cost for the fabrication and installation of room number plates and room identification signs will be included in the cost of renovation.
E. Interior Room Identification Sign Detail

Figure 4 (for non-permanent rooms with removable nameplate)
NOTES:

1) All room numbers shall be engraved in a non-glare ultra-matte finish 1/16" engraving stock (Romark, or equivalent) with 1" tactile characters, raised minimum 1/32" and include Braille cell below the room number. All characters shall be uppercase. (See Figure 4)

2) All permanent assigned rooms shall be engraved in a non-glare reverse engraveable ultra-matte finish 1/16" engraving stock (Romark, or equivalent) with minimum 5/8" tactile characters, raised minimum 1/32" and include Braille cell below verbiage. Restrooms, stairwells, floor designators, mechanical equipment, electrical equipment, telecommunications equipment and elevator equipment fall into this category. All characters shall be
3) Non-permanent room names shall be engraved in a non-glare ultra-matte finish 1/16” engraving stock (Romark, or equivalent). Character height may vary depending on length. Characters shall be upper/lower case. Characters shall be conventional in form. Sizes of plates can be 4 5/8” x 9” or 3” x 9”. (see Figure 4)

4) All nameplates shall be engraved in a non-glare ultra-matte finish 1/16” engraving stock. Character height may vary depending on length. Characters shall be upper/lower case. Size will be 1.5” x 9”. Nameplates are to slide into a 1 5/8” x 9” aluminum bracket in silver or anodized black or gold pending on scheme and design constraints. Color shall be determined by project manager and approved by the Sign and Graphics Shop before bidding. Font is to be Optima Semi Bold throughout. The project manager and the Sign and Graphics Shop will accept no deviance without prior signed approval.

5) All room numbers, nameplates, and room identification signs will be adhered to 1/8” thick finish PVC material (Sintra, Celtec, Komacel, Komatex, or equivalent) with 3M VHB Very High Bond Joining Systems #9473 double-sided tape (or equivalent). All signs to be mounted on block wall shall have the entire perimeter of the sign taped with 3M double-sided black tape #4432 (or equivalent). All signs mounted on drywall, wallboard, etc. shall be installed with 1.25” x #6 counter sunk Phillips head screws.

6) Signs shall be installed one inch from the latch side of the casing jamb to the leading edge unless architectural barrier or overriding design constraint exists.
If required as part of a project, coordination between the user, Department of Operations and Maintenance, and the Department of Architecture, Engineering, and Construction is required to determine specific requirements and acceptable manufacturers.
1.1 GENERAL REQUIREMENTS

A. Restroom facilities must be designed for ease of maintenance.
B. Graffiti resistant finishes shall be specified where possible.
C. Specify all stainless steel or chrome plated brass fittings for long-lasting quality.
D. Each restroom shall have individual exhausts to prevent sound transmission.
E. Ceramic tile shall be installed at floors and walls to a minimum height 4'-0" above finished floor. Provide continuous wood blocking behind an accessory when the toilet accessory partially overlaps the ceramic tile.

1.2 UNISEX / FAMILY TOILET ROOM

A. An accessible unisex/family toilet room shall be provided in all buildings.
B. Locate one toilet on the main entrance level of the building if more than one unisex/family toilet is required by code. Every attempt should be made to collocate this toilet with other multiple-fixture toilet rooms.
C. Fixtures: Provide minimum one (1) water closet, one (1) urinal and one (1) lavatory within the room.
D. Accessories: University standard toilet room accessories and one (1) infant changing station.

1.3 TOILET PARTITIONS

A. Partitions shall be floor mounted overhead braced solid plastic, mounted to walls using continuous wall brackets and continuous hinges. The head rail shall be a heavy-duty anti-grip design to prevent vandalism.
B. Partition shall meet the interior finish requirements of NFPA 101. (Note: The required fire test is ASTM E-84, which is the same as ANSI 2.5, CAN/ULC S102M, NFPA 255, UBC 42-1, UL723; Flame Spread Max. 200 and Smoke Developed Max. 450) Partitions shall have Site Proof doors and a heat sink at bottom edges.
C. Acceptable manufacturers: Comtec Industries and Rockville Partitions Incorporated.

1.4 TOILET ROOM ACCESSORIES

A. All restroom equipment shall be included in the construction contract. The contract drawings shall locate the equipment and identify any wall support requirements associated with installation.

The following University standard toilet room accessories shall be specified:

1. Toilet Tissue Dispenser: Bay West/ Wausau Paper Model Silhouette Revolution 3-Roll OptiCore Bath Tissue Dispenser #80300. Mount the unit between 7" min. and
10.06 RESTROOM REQUIREMENTS (11-21-11)

**to 9" max. from the leading edge of the Water Closet** to the center of the dispenser, a minimum of 19 inches **and maximum of 48 inches** above the floor **to the dispenser opening**. Mount dispenser in wheelchair accessible stalls so that the outlet is a minimum of six (6) inches to twelve inches maximum clear above the **top of the** grab bar.

2. **Sanitary Napkin Receptacle**: Rubbermaid Model No. 6140 or Rochester Midland #25125200. Wall mount in each toilet stall in Women’s Toilet room, and a minimum 15 inches above the floor in wheelchair accessible stalls.

3. **Paper Towel Dispenser**: Bay West/Wausau Paper #86500 OptiServ Hands-Free Roll Towel Dispenser. Mount so that the lever shall not exceed 48 inches **from above the finish** the floor.

4. **Soap Dispenser**: Gojo Touch-Free TFX Dispenser #2730-12(Black). Mount so that the soap outlet shall not exceed 48 inches above the floor.

5. **Mirrors**: Stainless steel framed mirrors minimum size 18 inches x 36 inches, mounted over each lavatory. Facilities Management will consider continuous mirrors on a case-by-case basis.

6. **Electric Hand Dryer**: Provide minimum one (1) electric hand dryer in each toilet room.

7. **Infant Changing Station**: Provide one (1) horizontally mounted infant changing station that complies with ADA in each men’s and women’s toilet rooms on the first (main building entrance level) floor of all new construction.

Acceptable manufacturers include: Baby Changing station by Koala Bear Kare and Diaper Deck by American Infant Care Products (AICP), or approved equal. The color to be determined on a project-by-project basis.

1.5 PLUMBING

A. Wall mounted lavatories with drained indentation for soap are preferred. Facilities Management will consider countertop lavatories on a case-by-case basis. Acceptable manufacturers care: American Standard, Kohler or Crane.

B. Public restroom lavatories shall be 29 inches clear from floor to underside of lavatory apron to allow regular **standard** lavatories to **provide accessibility**. Wheelchair lavatories are not to be specified.

C. Water closets shall be floor mounted, with elongated bowl and Sloan Optima Plus Battery-powered, or equal, hard wired flush valves with manual override for water closets, urinals and lavatories. Contact Facilities Management for acceptable manufacturers.

D. Flush valve levers shall be located on **accessible** side in wheelchair stalls for easy reach.

E. Urinals shall be wall mounted 17 inches maximum height to the rim in each Men’s Toilet room. Provide one (1) minimum in each room and one (1) additional for every ten (10) or more urinals required by code.
F. Provide one (1) floor drain in each restroom. Floor drains shall be located under stall partitions away from foot traffic areas. Slope the floor to drains. Access to trap primers is required.

1.6 ELECTRICAL

A. Provide a minimum of two (2) 120v receptacles on a separate 20 amp circuit spaced along wall above lavatories and adjacent to wall-mounted mirrors. Specify GFCI receptacles.

B. All requirements shall be designed in accordance with NEC. One (1) light fixture minimum shall be connected to emergency power.