

#### **FINISHES**

This section of the Washington University School of Medicine (WUSM) Design Standards addresses the following requirements for Finishes and its application in WUSM projects:

MATERIAL & FINISH MATRIX CEILINGS

**ACOUSTICAL TILE CEILINGS** 

**FLOORING** 

TILE

TERRAZZO, COMPOSITE STONE TILE, NATURAL STONE TILE

RESILIENT TILE FLOORING

RESILIENT SHEET FLOORING

**EPOXY FLOORING** 

**CARPET TILE** 

BROADLOOM CARPET

WALL BASE

**RESILIENT BASE** 

**WALLS** 

WALL COVERINGS

FIBERGLASS REINFORCED PANELS

**PAINTING** 

**DRY-ERASE COATINGS** 

**HIGH PERFORMANCE COATINGS** 

A Design Finishes Meeting shall be conducted to review all material and finish selections during the Design Development Phase of the project. Preview options with WUSM Senior Planner / Project Manager prior to this meeting. Finish options shall be limited to three choices.

### References:

The Tile Council of North America (TCNA)

American National Standards Institute (ANSI)

American Society for Testing and Materials (ASTM)

American Association of Textile Chemists and Colorists (AATCC)

### Standards References:

ACCESSIBILITY / UNIVERSAL DESIGN CUSTODIAL



## **MATERIAL & FINISH MATRIX**

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Refer to corresponding Standards Section for specific detail on all material and finish requirements

Permitted

O Permitted as appropriate to project

 $<sup>^{</sup>st}$  Specialty Classroom finishes to match permitted finishes for the space being simulated



#### **ACOUSTICAL TILE CEILINGS**

### **DESIGN GUIDELINES**

 This design standard has been established to standardize typical acoustical ceiling tile installation at WUSM. Where minor renovations occur within a department and adjacent ceiling areas are scheduled to remain, the ceiling tiles and suspension system (if appropriate for the area) shall match the existing adjacent ceiling as close as commercially possible. Verify type with WUSM Project Manager.

### PRODUCT REQUIREMENTS

- Ceiling tile types and descriptions referenced below are from Armstrong World Industries, Inc. Equal substitutions are permitted. Any deviations from these standards must be approved by WUSM Capital Projects.
- 2. All ceiling products shall be Class A minimum. It is the design professional's responsibility to determine need and location for use of fire guard/fire resistive products for use in UL floor/ceiling assemblies.
- 3. Acoustic panels shall be square lay-in, minimum 0.7 NRC, in white. No tegular edge tiles may be used unless approved by WUSM Project Manager.

## **Design Standard Typical Installations**

Ceiling Tile	<u>Size</u>	<u>Type</u>	Typical Locations
ACT-1	2' x 2' x 3/4" Square Edge	Ultima or Ultima Healthzone	Break Rooms, Coffee Areas, Corridors / Passages, File Rooms, Kitchenettes, Offices, and Laboratory Corridors & Offices.
ACT-2	2' x 4' x 5/8" Square Edge	Ultima	Loading Docks, Maintenance Rooms, Mechanical / Utility Rooms, Storerooms, and Laboratories.
ACT-3	2' x 2' x 5/8" Square Edge	Ultima	Administrative Areas, Building & Elevator Lobbies, Classrooms, Conference Rooms, Public Corridors, Entrance Vestibules, and Executive Offices.
ACT-4	2' x 4' x 5/8" Square Edge	Clean Room VL	Areas requiring a washable surface such as Animal Holding & Surgery Rooms, some Specialty Classrooms, Hazardous Storage Rooms, High Hazard Laboratories, Operating Rooms, Procedure Rooms, and Specialty Laboratories (Tissue Culture, Clean Rooms, BSL2 Labs, etc.). Drywall ceilings may also be appropriate for these locations. BSL3 Laboratories must have drywall ceilings.



**ACT-5** 2' x 4' x 5/8"

Square Edge Unperforated Ceramaguard

Provide moisture resistant acoustical panels at all damp / high humidity locations including Custodial Closets, Autoclaves, Cart Washing Rooms, and Glass Washing Rooms. Drywall ceilings may also be appropriate for these locations.

### 4. Grid System:

- a. Ceiling grid system shall be Prelude XL 15/16" exposed tee system with a white baked on enamel finish or approved equal. Use of colored grid or different grid widths are by exception only and must be approved by WUSM Project Manager.
- b. Ceiling grid system at damp locations and clean rooms shall be 15/16" Co-Extruded CLEAN ROOM gasketed aluminum grid system or approved equal. Optional use of 1-1/2-inch grid width at clean room ceilings is acceptable. Wall molding at these locations shall be gasketed aluminum. Hang wires should be non-rusting.
- c. 9/16" exposed tee system may not be used unless approved by WUSM Project Manager.
- d. Concealed spline suspension systems shall be used only in renovation areas where required to match existing.
- e. Elevator Lobbies shall be acoustical lay-in ceiling with drywall accents as appropriate and approved by WUSM Project Manager.

### 5. Seismic Design:

- a. The latest adopted version of the International Building Code (IBC) shall be followed. Local codes may also apply.
- b. WUSM design standard is Category "C". NOTE: If it is the Architect's belief that the project requires designing to a greater seismic design category (D, E & F) the WUSM Project Manager must be notified by the Architect along with a reason to substantiate the greater risk level. Notification should take place no later than the Design Development phase.

## **INSTALLATION**

- 1. Ceiling pattern for each area shall be designed so that opposite sides of room are equal and provide a minimum tile size of 6".
- 2. Hold down clips shall be used at all building vestibules to prevent uplift of ceiling tiles.
- 3. Provide one carton of attic stock for each ceiling tile product used.

### **TILE**

**DESIGN GUIDELINES** 



- Porcelain Floor Tile shall be standard in Multi-Stall and Single-Stall Restrooms and Shower Rooms. It may be appropriate for Building Lobbies and Elevator Cabs (Passenger). Other permitted locations shall be verified with WUSM Capital Projects.
- 2. Quarry Tile may be appropriate for Commercial Kitchens, Cart Washing Rooms, and Glass Washing Rooms.
- 3. Special tiles that require custom installations or have a long lead time must be approved by WUSM Project Manager.
- 4. When renovating existing buildings, match existing tile where required.

### PRODUCT REQUIREMENTS

- 1. All floor tile, including elevator floors, shall be large format (6" min.) Porcelain Tile with a slip resistant surface. Smaller tile by exception only.
- 2. In locations where Quarry Tile is appropriate, all tile to have a slip resistant surface.
- 3. Wall tile shall be large format Porcelain or Ceramic Tile (3"x6" min.) with a glazed finish. Smaller tile by exception only. Standard installation is a wainscot on walls with paint above. Coordinate height of tile wainscot with the required mounting heights of all wall mounted accessories and devices and the unit height of tile product to avoid cut tiles. Full height tile walls by exception only.
- 4. All base tile shall be a minimum of 6" high and coved.
- 5. Install tile trim with bullnose at top and end conditions.
- 6. Waterproof membrane is required at shower floors and walls and recommended for floors in restrooms with showers. Waterproof membrane shall be flashed up all walls a minimum of 6".
- 7. Dark colored grout is preferred. Provide epoxy grout at a minimum. Consider anti-microbial grout in food prep areas. Proposed grout shall be reviewed and approved by WUSM Senior Planner / Project Manager along with other materials and finish selections for color continuity.

#### **INSTALLATION**

- Tile installation shall be in strict compliance with the latest edition of The Tile Council of North America (TCNA) "Handbook for Ceramic, Glass, and Stone Tile Installation". Comply with parts of the ANSI A108 Series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.
- 2. Moisture vapor emissions testing shall be required at all new and existing concrete floor areas. Contractor to provide a SF unit cost for moisture mitigation on project.
- 3. Tile pattern for each area shall be dry laid for Architect's and WUSM Project Manager's review and approval or adjustment prior to proceeding with installation. Tile patterns shall be centered within room or space so that cut tiles at perimeter and projections are no less than half tiles and are equal at opposite sides. Align grout lines in floor with grout lines in wall where possible.
- 4. Joint width between tiles shall be kept to a minimum while meeting manufacturer's requirements.
- 5. Metal trim (Schluter or approved equal) shall be installed where exposed edge of tile flooring meets other flooring finishes, or at wall edges / corners where exposed edge of tile is visible. Taper subfloor as required for a smooth transition at material changes.



6. Extra material shall be provided for WUSM attic stock equal to 3 percent of amount installed for each type, composition, color, pattern, and size indicated.

#### TERRAZZO, COMPOSITE STONE TILE, NATURAL STONE TILE

#### **DESIGN GUIDELINES**

- Terrazzo, Composite Stone Tile, and Natural Stone Tile may be appropriate in Building & Elevator Lobbies. Other proposed locations shall be verified with WUSM Capital Projects. Reference Walk-off Carpet under CARPET TILES for guidelines on Entrance Vestibule flooring.
- 2. Special tiles that require custom installations or have a long lead time must be approved by WUSM Project Manager.
- 3. When renovating existing buildings, match existing tile where required.

### PRODUCT REQUIREMENTS

- 1. Floor tile shall be large format (6" min.) and hard surfaced with a slip resistant finish. Smaller tile by exception only.
- 2. Floor tile with a cleft-face finish is not acceptable.
- 3. Dark colored grout is preferred. Provide epoxy grout at a minimum on floors. Proposed grout shall be reviewed and approved by WUSM Senior Planner / Project Manager along with other materials and finish selections for color continuity.

### **INSTALLATION**

- Tile installation shall be in strict compliance with the latest edition of The Tile Council of North America (TCNA) "Handbook for Ceramic, Glass, and Stone Tile Installation". Comply with parts of the ANSI A108 Series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.
- 2. Moisture vapor emissions testing shall be required at all new and existing concrete floor areas. Contractor to provide a SF unit cost for moisture mitigation on project.
- 3. Tile pattern for each area shall be dry laid for Architect's and WUSM Project Manager's review and approval or adjustment prior to proceeding with installation. Tile patterns shall be centered within room or space so that cut tiles at perimeter and projections are no less than half tiles and are equal at opposite sides. Align grout lines in floor with grout lines in wall where possible.
- 4. Joint width between tiles shall be kept to a minimum while meeting manufacturer's requirements.
- 5. Metal trim (Schluter or approved equal) shall be installed where exposed edge of tile flooring meets other flooring finishes, or at wall edges / corners where exposed edge of tile is visible. Taper subfloor as required for a smooth transition at material changes.
- 6. Extra material shall be provided for WUSM attic stock equal to 3 percent of amount installed for each type, composition, color, pattern, and size indicated.



#### RESILIENT TILE FLOORING

#### **DESIGN GUIDELINES**

- Vinyl Composition Tile (VCT) shall be standard in Break Rooms, Coffee Areas, Kitchenettes, Storerooms, Laboratories, and Laboratory Corridors. High Hazard, Specialty, and BSL3 Laboratories are not included in this list, and shall require sheet vinyl or epoxy flooring. Reference those sections for additional information. VCT may be appropriate in Corridors / Passages, Custodial Closets, and File Rooms. Other permitted locations shall be verified with WUSM Capital Projects.
- Enhanced Vinyl Tile (EVT), Luxury Vinyl Tile (LVT), and Solid Vinyl Tile (SVT) may be considered in Break Rooms, Coffee Areas, Corridors / Passages, and Kitchenettes. Proposed locations shall be verified with WUSM Capital Projects.
- 3. The Architect shall verify on a per project basis the chemical utilized within each laboratory to ensure the appropriate flooring product is specified.

### PRODUCT REQUIREMENTS

- 1. VCT shall be minimum 12"x12"x1/8" thick, ASTM F 1066, Class 2, Through Pattern, Type IV, Composition 1.
- 2. EVT, LVT, and SVT shall be 2.5-mm thick, ASTM F 1700, Class III, Type B Embossed Surface, Commercial 31, Critical Radiant Flux: ≥ 0.45 watts/cm2 (ASTM E 648, Class I), Specific Optical Smoke Density: ≤ 450 (ASTM E662).
- 3. Metal trim (Schluter or approved equal) at the edge of tile with tapered fill for a smooth transition is preferred for differing height floor material transitions. Trim shall have appropriate profile for thickness of material.
- 4. Solid vinyl edge strips at floor material transitions shall be by exception only.

### **INSTALLATION**

- 1. Tile pattern shall be centered in the room or space, so that cut tiles at perimeter and projections are a minimum of half tiles and equal at opposite sides.
- 2. Adhesives and primers shall be as recommended by the flooring manufacturer.
- 3. Moisture vapor emissions testing shall be required at all new and existing concrete floor areas. Contractor to provide a SF unit cost for moisture mitigation on project.
- 4. Flooring installer shall skim coat all existing flooring substrate areas scheduled to receive resilient tile flooring. Contractor to provide a SF unit cost for additional skim coat as needed.
- 5. Extra material shall be provided for WUSM attic stock equal to 1/2 box to 1 full box of tile for each type, composition, color, and size. Additional boxes of remaining material shall be removed from the project site.
- 6. VCT: After flooring acceptance the installer shall strip the VCT ready for waxing. General Contractor shall be responsible for the application of four coats of wax. Wax shall be the preferred WUSM floor wax.

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7. EVT, LVT, and SVT: After flooring acceptance the installer shall clean the flooring ready for use. Flooring requires no waxing.

#### RESILIENT SHEET FLOORING

#### **DESIGN GUIDELINES**

- Sheet Vinyl flooring shall be standard in Operating Rooms, Procedure Rooms, and some Specialty Laboratories. Sheet vinyl flooring may be appropriate in High Hazard and BSL3 Laboratories, and some Single-Stall Restrooms. Other permitted locations shall be verified with WUSM Capital Projects.
- 2. The Architect shall verify on a per project basis the chemical utilized within each lab to ensure the appropriate flooring product is specified.

#### PRODUCT REQUIREMENTS

- 1. Flooring shall have welded seams and 4" high minimum integral cove base in Single-Stall Restrooms, High Hazard & BSL3 Laboratories, Operating Rooms, Procedure Rooms, and some Specialty Laboratories. All other areas shall have heat welded seams and vinyl cove base.
- 2. Flooring shall be commercial grade with high resistance to indentation, rolling loads, and acid, alkalis, and organic solvents.
- 3. Flooring shall be homogenous vinyl composition with the pattern extending uniformly through the thickness of the sheet. Flooring shall be 0.080-inch gauge nominal, non-layered, non-backed sheet flooring in 6-foot minimum width.

### **INSTALLATION**

- 1. Installer shall be certified by the manufacturer and have a minimum of five (5) years of experience installing sheet vinyl flooring requiring a heat welded seam.
- 2. Adhesives and primers shall be as recommended by the flooring manufacturer.
- 3. Moisture vapor emissions testing shall be required at all new and existing concrete floor areas. Contractor to provide a SF unit cost for moisture mitigation on project.
- 4. Flooring installer shall skim coat all existing flooring substrate areas scheduled to receive resilient sheet flooring. Contractor to provide a SF unit cost for additional skim coat as needed.
- A seaming diagram shall be provided by the supplier for the installer's review and confirmation of layout and material quantities. Seams must be kept to a minimum. Seams shall be positioned as follows:
  - a. Seams shall run the length of the area.
  - b. Seams shall run along the main traffic flow.
  - c. Seams shall be away from areas subject to pivoting.
  - d. Seams shall not be perpendicular through a door opening.
- 6. Remaining flooring materials shall be rolled, wrapped, labeled, and turned over to WUSM for attic stock. Pieces or scraps of material shall be recycled.



7. Waxing of sheet vinyl flooring shall be by exception only and must be reviewed and approved by the WUSM Project Manager.

#### **EPOXY FLOORING**

#### **DESIGN GUIDELINES**

a. Seamless troweled Epoxy Flooring shall be standard in Loading Docks, Maintenance Rooms, Mechanical / Utility Rooms, Animal Holding & Surgery Rooms, Autoclaves, Cart Washing Rooms, Glass Washing Rooms, and Hazardous Storage Rooms. Epoxy Flooring may be appropriate in High Hazard & BSL3 Laboratories. Other permitted locations shall be verified with WUSM Capital Projects.

#### PRODUCT REQUIREMENTS

- 1. Integral epoxy cove base shall be 4" high minimum on all walls bordering the epoxy flooring.
- 2. Aggregate shall be applied to epoxy resin to insure proper slip resistance and impact resistance. Provide sample to be approved by users.
- 3. Epoxy resin formulation shall be resistant to acids, chemicals, solvents, and food.
- 4. Epoxy resin shall be installed to a thickness of no less than 3/16".
- Colors shall be selected from manufacturer's standard colors and approved by WUSM Capital Projects.

### INSTALLATION

- 1. Installer shall have at least five (5) years of experience installing epoxy flooring.
- 2. Moisture vapor emissions testing shall be required at all new and existing concrete floor areas. Contractor to provide a SF unit cost for moisture mitigation on project.
- The method of exhausting the air during installation and drying process shall be reviewed by WUSM Capital Projects prior to start due to the high VOC rating. Installation may have to be completed during off-hours.

### **CARPET TILE**

### **DESIGN GUIDELINES**

- Carpet Tile shall be standard in Administrative Areas, Classrooms, Conference Rooms, Elevator Lobbies, Offices, Work / Copy, Elevated Walkways, and Laboratory Offices. Carpet Tile may be appropriate in Corridors / Passages, Elevator Cabs (Passenger), and File Rooms. Other permitted locations shall be verified with WUSM Capital Projects.
- Modular Walk-Off Carpet shall be standard at Entrance Vestibules. Modular Walk-Off Carpet may be appropriate in some Elevator Cabs (Passenger). Other permitted locations shall be verified with WUSM Capital Projects.



3. Warranty period shall be 10-year minimum against edge ravel, de-lamination, zippering, wear, and tuft bind.

### PRODUCT REQUIREMENTS

- Accepted manufacturers include Atlas, Bentley, Interface, J&J-Invision, Mannington, Masland Contract, Mohawk Commercial, Shaw, and Tarkett.
- 2. Indoor air quality shall be maximum 0.5 mg<sup>2</sup>hr total VOC emission per ASTM D5116.
- 3. Carpet tiles shall meet the following minimum standards:
  - a. Preferred yarn shall be 100% first quality bulk continuous filament nylon type 6,6 offering a construction and performance standards testing program by fiber producer. Fiber shape shall have maximum Modification Ratio of 1.5 for soil release capabilities. Fiber identification to AATCC 20.
  - b. Static control shall be by permanent means (i.e. antistatic filaments) and without chemical treatment, static generation below 3.5 kilovolts under standard conditions of 65 degrees F and 20 percent relative humidity. Electrostatic Propensity (Static delayed signal) to AATCC 134.
  - Construction shall be tufted or woven, level or multi-level loop pile with maximum height variation 0f 1/32-inch.
  - d. Preferred dye method shall be 100 percent solution dyed.
- 4. Remove used carpet and recycle regardless of manufacturer, fiber type, or construction. Reclamation Agency and Carpet Remover shall certify in writing that used carpet was removed and recycled. Landfills are not an option.
- 5. Modular Walk-Off Carpet shall be Bentley "Rough Idea" or approved equal. At all Elevated Walkways, Antron type 6,6 nylon hollow filament is required. Alternate products must be approved by WUSM Project Manager. Recessed floor mats are by exception only.

## INSTALLATION

- 1. Installer shall be an experienced installer with a minimum of three (3) years of experience, who is INSTALL certified, and is a member of the Certified Flooring Installers Association, Inc.
- 2. All carpet tiles shall be stored and installed in strict compliance with the manufacturer's installation instructions, including carpet tile direction and pattern. Installation diagram to be provided for Architect's and WUSM Project Manager's review.
- Moisture vapor emissions testing shall be required at all new and existing concrete floor areas.
   Contractor to provide a SF unit cost for moisture mitigation on project. Recommended mode of testing to be in-situ probe for relative humidity (RH) readings.
- 4. Metal trim (Schluter or approved equal) at the edge of carpeting with tapered fill for a smooth transition shall be installed at all material transitions.
- 5. Solid vinyl transitions or reducers shall be installed by exception only.
- 6. Carpet tile scraps must be recycled. Remaining carpet tile shall be neatly stacked, wrapped, labeled and turned over to the Owner for attic stock.



#### **BROADLOOM CARPET**

#### **DESIGN GUIDELINES**

- Carpet Tile is the preferred product in the following locations, but Broadloom Carpet may be permitted in Administrative Areas, Classrooms, Conference Rooms, Corridors / Passages, Elevator Lobbies, Offices, and Work / Copy. Permitted locations shall be verified with WUSM Capital Projects.
- 2. Carpet shall be loop pile direct glue. Cut pile and carpet pad shall be by exception only.

#### PRODUCT REQUIREMENTS

- 1. Accepted manufacturers include Atlas, Bentley, Interface, J&J-Invision, Mannington, Masland Contract, Mohawk Commercial, Shaw, and Tarkett.
- 2. Indoor air quality shall be maximum 0.5 mg<sup>2</sup>hr total VOC emission per ASTM D5116.
- 3. Broadloom carpet shall meet the following minimum standards:
  - a. Preferred yarn shall be 100% first quality bulk continuous filament nylon type 6,6 offering a construction and performance standards testing program by fiber producer. Fiber shape to have maximum Modification Ratio of 1.5 for soil release capabilities. Fiber identification to AATCC 20.
  - b. Static control shall be by permanent means (i.e. antistatic filaments) and without chemical treatment, static generation below 3.5 kilovolts under standard conditions of 65 degrees F and 20 percent relative humidity. Electrostatic Propensity (Static delayed signal) to AATCC 134.
  - Construction shall be tufted or woven, level or multi-level loop pile with maximum height variation of 1/32-inch.
  - d. Preferred dye method shall be 100 percent solution dyed.
  - e. Resistance to delamination shall comply with ASTM D3936 minimum of 3.0 lbs./inch.
  - f. Tuft bind shall comply with ASTM D1335 minimum 10 lbs.
  - g. Pile density shall be 5500.
- 4. Remove used carpet and recycle regardless of manufacturer, fiber type, or construction. Reclamation Agency and Carpet Remover shall certify in writing that used carpet was removed and recycled. Landfills are not an option.

## **INSTALLATION**

- 1. Installer shall be an experienced installer with a minimum of three (3) years of experience, who is INSTALL certified, and is a member of the Certified Flooring Installers Association, Inc.
- 2. Installation shall comply with CRI's "CRI Carpet Installation Standard" and carpet manufacturer's written instructions for direct glue down installation and stair installation.
- 3. Installation shall comply with shop drawings for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, seams shall be centered under door in closed position.



- 4. Moisture vapor emissions testing shall be required at all new and existing concrete floor areas. Contractor to provide a SF unit cost for moisture mitigation on project. Recommended mode of testing to be in-situ probe for relative humidity (RH) readings.
- 5. Metal trim (Schluter or approved equal) at the edge of carpeting with tapered fill for a smooth transition shall be installed at all material transitions.
- 6. Solid vinyl transitions or reducers shall be installed by exception only.
- 7. Carpet scraps must be recycled. Remaining carpet shall be rolled, wrapped, labeled and turned over to the Owner for attic stock.

#### **RESILIENT BASE**

#### **DESIGN GUIDELINES**

1. Vinyl Cove Base shall be standard for most hard surface and carpet floor finishes. Thick Rubber Base may be appropriate in Administrative Areas, Classrooms, Coffee Areas, Conference Rooms, Corridors / Passages, Elevator Lobbies, and Entrance Vestibules. Straight base shall be used by exception only. Other base materials must be approved by WUSM Capital Projects.

## PRODUCT REQUIREMENTS

- 1. Vinyl base shall be 1/8" thick, 4" high cove base complying with ASTM F-1861, either continuous or in 48" lengths. 6" high cove base may be appropriate on minor interior finish renovation projects when approved by WUSM Project Manager.
- 2. Vinyl base throughout the project shall be one color. Additional colors shall be on a per project basis and approved by WUSM Project Manager.

### **INSTALLATION**

- 1. No seams in vinyl base shall be allowed within 12" of corners.
- 2. Outside corners shall be integral with no molded corners. Inside corners shall be cut and coped.
- 3. Upon project completion after acceptance of the flooring installation the installer shall remove from the project site all remaining base materials and adhesives and dispose of legally.

#### **WALL COVERINGS**

#### **DESIGN GUIDELINES**

 Wall Coverings may be appropriate for Administrative Areas, Building and Elevator Lobbies, Conference Rooms, and some Corridors / Passages. Locations shall be verified with WUSM Project Manager. Wall Coverings on exterior walls or in high humidity areas are by exception only.

## PRODUCT REQUIREMENTS



- Wall Coverings shall be 54" wide, have a minimum total coating weight of not less than 13 oz. per square yard of vinyl surface, a total weight per square yard of not less than 16 oz., type II, Class
- 2. Woven polyethylene textiles (Xorel or approved equal) may be appropriate in permitted locations as verified by WUSM Capital Projects.

#### INSTALLATION

- 1. Wall Covering installation shall comply with manufacturer's written installation instructions applicable to products and applications indicated.
- 2. Seams shall be vertical and plumb at least 6" from outside corners and 3" from inside corners unless a change of pattern or color exists at corner. Horizontal seams shall not be permitted.

#### FIBERGLASS REINFORCED PANELS

#### **GENERAL**

- 1. Fiberglass Reinforced Laminate Panels or Acrovyn Panels (or approved equal) may be appropriate in some Building & Elevator Lobbies that require wall protection.
- 2. Custodial closets shall receive a 48" high wainscot of Fiberglass Reinforced Plastic (FRP) panels on all walls. Reference CUSTODIAL for guidance on custodial closet layout.

#### PRODUCT REQUIREMENTS

1. Plastic Wall Panels shall be Crane Composites Glasbord as manufactured by Crane Composites, Inc. or approved equal. Surface finish to be pebbled embossed texture. Provide division bars, caps, and corner trim to complete system.

### INSTALLATION

- 1. Installation of fiberglass reinforced panel system shall be in accordance with manufacturer's written instructions and installation guide.
- 2. Layout panels to minimize vertical joints. No joints allowed above or within 6-inch of mop basins. Caulk perimeter of panel trim where it meets the wall or base substrates.

## **PAINTING**

#### **DESIGN GUIDELINES**

- Latex paint shall be standard for offices and corridors and areas of low abuse, low humidity.
   Finish shall be eggshell.
- 2. Latex paint shall be standard for metal doors and frames and other painted metals. Painted wood trim shall also be latex paint. Finish shall be semi-gloss.
- Epoxy paint shall be used in all wet rooms, including operating rooms, restrooms, animal quarters and shop areas. See HIGH PERFORMANCE COATINGS.



 Verify with WUSM Project Manager the specific performance expectations for laboratories. See HIGH PERFORMANCE COATINGS.

### PRODUCT REQUIREMENTS

- 1. Color selections shall be proposed by Architect and approved by WUSM Capital Projects.
- 2. All materials shall be in compliance low-odor/VOC standards.
- 3. All products shall comply with MPI standards and shall be listed in "MPI Approved Products Lists."
- 4. All coatings shall be best quality professional grade as manufactured by one of the following:
  - a. Benjamin Moore.
  - b. Glidden Professional.
  - c. Pittsburgh Paints.
  - d. Sherwin-Williams.

#### 5. Paint Schedule:

- a. Masonry Block, Concrete, Drywall and Plaster: One (1) coat latex primer and two (2) coats latex eggshell wall finish. Masonry block shall receive one (1) coat block filler in lieu of primer.
- b. Ferrous Metal Surfaces: One (1) coat rust inhibitive, water based, primer and two (2) coats latex, semi-gloss finish.
- c. Wood (Painted): One (1) coat latex, for interior wood primer and two (2) coats latex, semi-gloss finish.
- d. Interior of ducts connecting to exhaust or return grilles, registers, or diffusers shall receive two (2) coats of latex flat black finish, to a distance of two (2) feet from outlet.
- e. All exposed to interior view pipe, conduit, fittings, valves, hangers, supports and uninsulated ductwork occurring in finished areas shall have exterior surfaces painted with one(1) coat rust inhibitive or galvanized, water based primer and one (1) coat latex, eggshell finish.
- f. All exposed to view insulated piping, valves, fittings, equipment and ductwork (visible exterior surfaces occurring in finished areas) shall receive one (1) coat rust inhibitive or galvanized, water based, primer and one (1) coat latex to match adjacent finish surfaces.

### INSTALLATION

- 1. Paints shall be applied in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual."
- 2. Paints shall be applied to produce surface film without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections.
- 3. Fill chips and voids in all concrete walls scheduled to receive paint finish.



#### **DRY-ERASE COATINGS**

#### **DESIGN GUIDELINES**

1. Dry-Erase Coatings may be appropriate in some locations. Review with WUSM Project Manager.

### PRODUCT REQUIREMENTS

1. Dry-Erase Coatings shall be Wink Wall or approved equal.

### **INSTALLATION**

- 1. Install signage that clearly designates area where dry-erase markers may be used.
- 2. Frames at perimeter of area are not permitted.
- 3. Paint entirety of designated wall or use contrasting paint to distinguish dry-erase section on a larger wall.

### HIGH PERFORMANCE COATINGS

#### **DESIGN GUIDELINES**

- High Performance Coatings / Epoxy Paint on concrete floors shall be standard for Loading Docks, Maintenance Rooms, Mechanical / Utility Rooms, Animal Holding & Surgery Rooms, Autoclaves, Cart Washing Rooms, Glass Washing Rooms & Hazardous Storage Rooms. They may be appropriate in Custodial Closets, High Hazard Laboratories, and BSL3 Laboratories. Other permitted locations shall be verified with WUSM Capital Projects.
- Polychromatic Wall Coatings shall be standard for Animal Holding & Surgery Rooms, Autoclaves, Cart Washing Rooms, Glass Washing Rooms, Hazardous Storage Rooms, High Hazard Laboratories, BSL3 Laboratories, Operating Rooms, and Procedure Rooms. They may be appropriate in some Loading Docks. Other permitted locations shall be verified with WUSM Capital Projects.

## PRODUCT REQUIREMENTS

- 2. Floor sealant/treatment for concrete floors shall be clear penetrating liquid.
- 3. High Performance Coatings shall be antimicrobial and antifungal epoxy paint.

#### **INSTALLATION**

- 4. High Performance Coatings shall be applied in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual."
- 5. High Performance Coatings shall be applied to produce surface film without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections.
- 6. Fill chips and voids in all concrete walls scheduled to receive High Performance Coatings.
- 7. Fill chips and voids in all concrete walls scheduled to receive High Performance Coatings.