



Division 09 Finishes

09 05 00 Common Work Results for Finishes

09 05 10 General Requirements for Finishes

1. Project Specifications shall be based on appropriate sections of the latest edition of the DFDM Master Specifications when applicable.
2. Deviations from DFDM's Minimum Design Guidelines or the DFDM Master Specification sections shall be made only upon approval from the UW-Madison Project Manager.
3. The UW-Madison Guidelines take precedence over DFDM Guidelines, but the A/E shall discuss all conflicts within the guidelines and specifications with the UW-Madison Project Manager.
4. It is the goal of the University to use sustainable finishes to the greatest extent possible.
5. Attic stock requirements shall be reviewed with the UW-Madison Project Manager. The UW-Madison Physical Plant generally does not want attic stock, but Building Managers with adequate space may prefer attic stock included in the project. Finish materials, such as carpet, ceiling tile, floor tile, sheet floor products, paint, and base, when requested and supplied, shall not exceed 2%. A/E shall consult with the UW-Madison Project Manager to confirm what attic stock is to be provided prior to the release of bid documents.
6. Hard surface floors shall be sealed/waxed for the first time by the installing contractor, using the same sealants/waxes UW-Madison custodians will use. Contractors shall contact UW-Madison Facilities Planning & Management for specifications of current finishes as needed. All sealant/waxing materials and methods shall conform with flooring manufacturer's recommendations. For final finishing of terrazzo, see *Section 09 66 13 Portland Cement Terrazzo Flooring*.
7. Follow the requirements in DFDM's Floor Drains Guide, which is available from the DFDM website.
8. Interior Finish Palette Specifications:
 - 8.1. Neutral/timeless color selections. All color selections shall be approved by the UW-Madison Project Manager. If the University has a standard color palette for the particular finish material, it should be considered first when developing color palettes.
 - 8.2. Durable/low maintenance finishes.
 - 8.3. One neutral paint color per building with small quantity of accent colors shall be permitted.
 - 8.4. At existing buildings maintain existing or established color palettes.



09 30 00 Tiling

1. Ceramic tile sizes shall be as large as is practical for the specific installation, yielding a minimum of grout joints. Tile shall be light in color. At a minimum, tile shall meet Class 4 ASTM C1027.
2. Grout colors shall be medium to dark in tone.
3. At a minimum, tile shall be provided on toilet room floors and as a wainscot on fixture walls. Full tile shall be the campus preferred wall finish for these spaces.

09 50 00 Ceilings

09 51 00 Acoustical Ceilings

1. The campus preferred ceiling tile shall be specified no larger than 2 feet x 2 feet, which is easily replaceable and humidity resistant.
2. The grid color for acoustical ceiling systems shall be white or a standard neutral color to match existing conditions, and not a special order.
3. Hard ceilings shall be specified in bathrooms and other areas with moisture.

09 60 00 Flooring

1. When applicable, all flooring products shall contain a minimum or no VOC.

09 64 00 Wood Flooring

1. Wood flooring shall not be specified near water, in high traffic areas, in building entrances or in stairs unless it is to match existing conditions.

09 65 00 Resilient Flooring

1. Rubber base is required; vinyl base is unacceptable.
2. Rubber stair treads are required; vinyl stair treads are unacceptable.
3. VCT and LVT are to have a minimum 20 mil wear layer.

09 66 00 Terrazzo Flooring

09 66 13 Portland Cement Terrazzo Flooring

1. Terrazzo shall be the campus preferred flooring material for all lobbies and preliminary circulation areas at the entrance level.
2. All terrazzo flooring shall be specified to have 2 coats of a water-based and water soluble polyurethane coating applied after it is completely installed to protect it from contractor wear and tear. This finish shall be able to be chemically removed (stripped) once the building is turned over to the University and final finish coats applied by UW-Madison Custodial. The protective coating shall not require mechanical means to remove.
3. If applicable, a container of the matching concrete mix shall be provided for repair purposes to the building manager when the project is complete.



09 66 16 Terrazzo Floor Tile

1. Terrazzo floor tile is not recommended for use on campus.

09 68 00 Carpeting

09 68 13 Performance Specifications for Tile Carpet

1. Product: Must be approved by the UW-Madison Project Manager prior to specification. If the University has a standard palette for the particular carpets at the time of design, it should be considered first when developing color palettes.
 - 1.1. Construction: Tufted.
 - 1.2. Surface Texture: Textured loop pile or tip sheared. Tip shear may be used in border application use.
 - 1.3. Yarn Weight: 16 ounce per square yard minimum.
 - 1.4. Density Weight: 6000 ounce per square yard minimum.
 - 1.5. Face Yarn: Nylon with a modification ratio of 2.0 or less.
 - 1.6. Dye System: 100% Solution Dye, unless using a small % of space dyed yarn for esthetics or 100% Yarn Dye that meets stain resistant properties listed below.
 - 1.7. Stain Retardant: Commercial grade stain guard required. Shall Pass AATCC 175, scoring no less than 8.0 (10.0 is the best) on the AATCC Red 40 Stain Scale after performing AATCC 171, minimum of 4 hot water extractions process.
 - 1.8. Soil Retardant: Shall maintain permanency of finish after performing AATCC 171, minimum of 4 hot water extractions process.
 - 1.9. Primary Backing: Reinforced synthetic
 - 1.10. Secondary Backing: Fiberglass reinforced thermoplastic composite
 - 1.11. Bonding Agent: Premium Vinyl
 - 1.12. Static Control: 3.0 KV when tested under Standard Shuffle test (70 degrees, 20% RH)
 - 1.13. Flammability:
 - 1.13.1.DOC-FF-1-70 Pill Test: Passes.
 - 1.13.2.Floor Radiant Panel: Meets NFPA Class 1 when tested per ASTM-E-648 glue down.
 - 1.14. NBS Smoke Chamber NFPA 258: Less than 450 Flaming Mode.
 - 1.15. Color Fastness:
 - 1.15.1.Light fastness - AATCC 16E-1982 - Dark color: Gray scale rating of 4 or better after 160 standard fading hours as compared to AATCC Gray Scale for evaluation change in color.
 - 1.15.2.Ozone and Gas - AATCC 129-1981 - Rating 3 or better per color AATCC transference



scale.

- 1.16. Stain Resistance: Manufacturer shall pass the GSA requirements for permanent stain resistant carpet.
- 1.17. Indoor Air Quality: Manufacturer shall demonstrate that carpet is certified under the CRI Green Label Plus Program.
2. Warranties:
 - 2.1. Manufacturer's Lifetime Warranty minimum 15 years, non-prorated, against product failure covering all costs including freight, labor, and material for the following:
 - 2.1.1. Edge Ravel/Tuft Bind
 - 2.1.2. Back lamination
 - 2.1.3. Static protection as stated above
 - 2.1.4. Wear - No more than 10% Face Yarn Loss
 - 2.1.5. Cup, Dome, Dish
 - 2.1.6. Dimensional stability
 - 2.1.7. Adhesive bond to the floor.
3. Stain Resistance:
 - 3.1. Stain resistant properties shall be permanent and not removable by commercial cleanings or abrasive wear. Under GSA requirements stain resistant carpets shall score no less than 8.0 (10.0 is the best) on the AATCC Red 40 Stain Scale. Test sample shall first be exposed to 100 revolutions on the Taber Abrader (1,000-gram weight per H-18 wheel) and then abraded area shall be stain tested using AATCC test method 175. Topical stain resistant treatments will not be acceptable. Stain resistant properties shall be inherent.
4. Environmental Attributes:
 - 4.1. Environmental claims by the manufacturer shall comply with FTC guidelines.
 - 4.2. Recycled Content: Carpet shall contain a minimum of 15% post-consumer recycled content.
 - 4.3. Carpet Face Yarn: In accordance with Executive Order 13101, carpet face yarn shall be third party certified as an Environmentally Preferred Product (EPP).
 - 4.4. Low Emitting Materials: Carpet and all installation components including adhesives, sealers, seam welds and seam sealers shall meet the *Low Emitting Materials* standards as outlined in current U.S. Green Building Council LEED criteria.
 - 4.5. End of Life Reclamation: Carpet must have an existing methodology actively in place to achieve landfill diversion.
 - 4.6. Adhesives: Waterproof, non-flammable carpet adhesive recommended and approved by carpet manufacturer in writing for compatibility with carpet backing. All floor sealers,



seam sealers, and adhesives shall contain no calculated solvents per OSHA Regulation 29 CFRE 1910.1200, have no calculated VOC's, be non-flammable, and meet the criteria of the CRI Green Label Plus Certification Program. MSDS and samples required on product used. Adhesives shall meet VOC emissions standards per South Coast Air Quality Management District Rule #1168.

09 68 16 Performance Specifications for Broadloom Carpeting

1. Product: Must be approved by the UW-Madison Project Manager prior to specification. If the University has a standard palette for the particular carpets at the time of design, it should be considered first when developing color palettes.
 - 1.1. Construction: Tufted.
 - 1.2. Fiber Shapes: Hollow filament fibers or modification ratio < 1.5MR
 - 1.3. Surface Texture: Multilevel or level loop pile with maximum height variation of 1/32".
 - 1.4. Yarn Weight: 20 ounce per square yard minimum.
 - 1.5. Density Weight: 6000 ounce per square yard. minimum.
 - 1.6. Face Yarn: Nylon with a modification ratio of 2.0 or less.
 - 1.7. Dye System: 100% solution dye unless using a small % of space dyed yarn for esthetics or 100% yarn Dye that meets stain resistant properties listed below.
 - 1.8. Stain Retardant: Commercial grade stain guard required. Must pass AATCC 175, scoring no less than 8.0 (10.0 is the best) on the AATCC Red 40 Stain Scale after performing AATCC 171, minimum of 4 hot water extractions process.
 - 1.9. Primary Backing: Woven polypropylene.
 - 1.10. Secondary Backing: Woven polypropylene.
 - 1.11. Width: 12 feet
 - 1.12. Tuft Bind: 20 pound Avg. tuft bind wet or dry per ASTM D-1335-67.
 - 1.13. Static Control: 3.0 KV when tested under Standard Shuffle test (70 degrees, 20% RH)
 - 1.14. Flammability:
 - 1.14.1. DOC-FF-1-70 Pill Test: Passes.
 - 1.14.2. Floor Radiant Panel: Meets NFPA Class 1 when tested per ASTM-E-648 glue down.
 - 1.15. NBS Smoke Chamber NFPA 258: Less than 450 Flaming Mode.
 - 1.16. Color Fastness:
 - 1.16.1. Light fastness: AATCC 16E-1982, - Dark color: Gray scale rating of 4 or better after 160
 - 1.16.2. Standard fading hours as compared to AATCC Gray Scale for evaluation change in



color.

- 1.16.3. Ozone and Gas: AATCC 129-1981 Rating 3 or better per color AATCC transference scale.
 - 1.17. Stain Resistance: Manufacturer shall pass the GSA requirement for permanent stain resistant carpet.
 - 1.18. Indoor Air Quality: Manufacturer shall demonstrate that carpet is certified under the CRI Green Label Plus Program
2. Warranties:
- 2.1. Manufacturer's Lifetime Warranty minimum 15 years, non-prorated, against product failure covering all costs including freight, labor, and material for the following:
 - 2.1.1. Edge Ravel – wet or dry.
 - 2.1.2. Back delamination - wet or dry.
 - 2.1.3. Loss of 20 pound average tuft bind - wet or dry.
 - 2.1.4. Static protection as stated above.
 - 2.1.5. Wear - No more than 10% Face Yarn Loss.
 - 2.1.6. Adhesive failure.
3. Stain Resistance:
- 3.1. Stain resistant properties shall be permanent and not removable by commercial cleanings or abrasive wear. Under GSA requirements stain resistant carpets must score no less than 8.0 (10.0 is the best) on the AATCC Red 40 Stain Scale. Test sample shall first be exposed to 100 revolutions on the Taber Abrader (1,000-gram weight per H-18 wheel) and then abraded area shall be stain tested using AATCC test method 175. Topical stain resistant treatments shall not be acceptable. Stain resistant properties shall be inherent.
4. Environmental Attributes:
- 4.1. Environmental claims by manufacturer shall comply with FTC guidelines.
 - 4.2. Environmentally Preferred Product – Carpet shall have third party certification (such as Scientific Certification Systems) in accordance with Executive Order 13101 as an Environmentally Preferred Product (EPP).
 - 4.3. Recycled Content: Carpet shall contain a minimum of 15% post-consumer recycled content based on total product weight.
 - 4.4. Rapidly Renewable Bio-based Materials: Carpet shall contain a minimum 10% bio-based rapidly renewable material based on total product weight.
 - 4.5. Carpet Face Yarn: In accordance with Executive Order 13101, carpet face yarn shall be third party certified as an Environmentally Preferred Product (EPP).
 - 4.6. Low Emitting Materials: Carpet and all installation components including adhesives,



sealers, seam welds and seam sealers shall meet the *Low Emitting Materials* standards as outlined in current U.S. Green Building Council LEED criteria.

- 4.7. Adhesives: Waterproof, non-flammable carpet adhesive shall be recommended and approved by carpet manufacturer in writing for compatibility with carpet backing. All floor sealers, seam sealers, and adhesives shall contain no calculated solvents per OSHA Regulation 29 CFRE 1910.1200, have no calculated VOC's, be non-flammable, and meet the criteria of the CRI Green Label Plus Certification Program. MSDS and samples required on product used. Adhesives shall meet VOC emissions standards per South Coast Air Quality Management District Rule #1168.
- 4.8. End of Life Reclamation: Carpet shall have an existing methodology actively in place to achieve landfill diversion.
5. Color and pattern shall be selected for durability and low maintenance.
6. No sculptured carpet shall be permitted.

09 70 00 Wall Finishes

09 72 00 Wall Covering

1. The use of wall covering in high traffic areas shall be discouraged.

09 90 00 Painting and Coating

1. When applicable, all painting and coating products shall contain a minimum or no VOC.

09 91 16 Painting for Utilities

1. Use DFDM Master Specification Section 09 91 16 for specifying painting for utilities.

09 93 00 Staining and Transparent Finishing

1. New wood casework shall be lightly stained and finished with polyurethane (not lacquer).
2. At existing buildings finishes shall match existing finishes at similar elements.

09 96 00 High-Performance Coatings

09 96 56 Epoxy Coatings

1. Epoxy paints shall be used in areas where durability and ease of cleaning are issues, such as toilet rooms, food service areas, etc.
2. Epoxy paints shall be used at a minimum of 12 inches up from steps in stairwells.