ADDENDUM NUMBER [02]

Date: January 3, 2025

Project Name: Johnson County Courthouse – Third Level Office Renovation
Project Number 18.112
Project Location: 417 S. Clinton St.

From: Neumann Monson Inc.
221 East College St., Suite 303
Iowa City, Iowa 52240
Phone: 319.338.7878

To: All Plan Holders

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated December 5, 2024 as noted below.

Acknowledge receipt of this Addendum by placing the number [02] in the appropriate blank provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of 2 pages and the following attachments:

Document	No. of Pages or sheet size
Section 06 1000 – ROUGH CARPENTRY	4 pages
Section 09 0190 – MAINTENANCE OF FINISHES	6 pages
Section 09 3000 – TILING	8 pages
Section 09 9300 – STAINING AND TRANSPARENT FINISHING	4 pages
Section 23 0713 – DUCT INSULATION	4 pages
Sheet A-411.5	24 inches by 36 inches
Sheet A-601.5	24 inches by 36 inches

CHANGES TO PRIOR ADDENDA: **NONE**

CHANGES TO INTRODUCTORY INFORMATION:

ITEM 2-1 An additional site visit to access the attic will be offered on January 6th, 2025 at 1:00 PM. Please meet Dave Curtis at the security entrance.

CHANGES TO PROCUREMENT AND CONTRACTING REQUIREMENTS:

ITEM 2-2 Clarification: The bid security may be included in the same sealed envelope as the bid form.

CHANGES TO TECHNICAL SPECIFICATIONS:

ITEM 2-3 SECTION 06 1000 – Rough Carpentry.

A. Replace the section in its entirety with the attached section.

ITEM 2-4 Add SECTION 09 0190 – MAINTENANCE OF FINISHES, to the project manual.

ITEM 2-4 SECTION 09 3000 – Tiling.

A. Replace the section in its entirety with the attached section.

ITEM 2-5 SECTION 09 9300 – STAINING AND TRANSPARENT FINISHING.

A. Replace the section in its entirety with the attached section.

ITEM 2-6 SECTION 23 0713 – DUCT INSULATION.

A. Replace the section in its entirety with the attached section.

CHANGES TO DRAWINGS:

ITEM 2-7 SHEET A-411.5 – INTERIOR ELEVATIONS

A. Interior Elevation A3 and A4: Modify titles.

ITEM 2-8 SHEET A-601.5 – DOOR AND FINISH SCHEDULE

A. Details A1, A2, A3: Modify details.

ITEM 2-9 SHEET T-102.5 – THIRD FLOOR TELECOM PLAN.

A. Modify referenced Note #1 to read: “NEW AV RACK LOCATION. RELOCATION OF EXISTING COURTROOM AV RACK BY OWNER. AV CONTRACTOR SHALL COORDINATE REQUIRED PATHWAYS WITH OWNER.”

APPROVED SUBSTITUTIONS

ITEM 2-10 ADD Greenheck Fan Corp.

END OF ADDENDUM NO. [02]

SECTION 06 1000
ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Rough opening framing for door and window openings.

B. Underlayment.

C. Concealed wood blocking, nailers, and supports.
   1. Includes dimension lumber framing, associated with casework and finish carpentry.

1.02 RELATED REQUIREMENTS

A. Section 05 5000 - Metal Fabrications: concealed steel support items.

B. Section 06 2000 - Finish Carpentry: finish applied to wood stud partial height partitions.

C. Section 06 4100 - Architectural Woodwork: items requiring blocking or wood stud partial height partitions.

D. Section 09 9000 - Painting and Coating: Painting of exposed mounting boards.

1.03 REFERENCE STANDARDS

A. PS 1 - Structural Plywood.

B. PS 20 - American Softwood Lumber Standard.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. See Section 01 3300 - Construction Submittals for submittal procedures.

C. Product Data: Provide technical data on construction panel materials.

D. Manufacturer's Certificate: Certify that wood products supplied for rough carpentry meet or exceed specified requirements.

1.05 QUALITY ASSURANCE

A. Lumber: Comply with PS 20 and approved grading rules and inspection agencies.

B. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements.

1.06 DELIVERY, STORAGE, AND HANDLING

A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

B. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, and installation.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
   1. Species: Douglas Fir-Larch, unless otherwise indicated.
   2. If no species is specified, provide species graded by the agency specified; if no grading agency is specified, provide lumber graded by grading agency meeting the specified requirements.
   3. Grading Agency: Grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee at www.alsc.org, and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.
   4. Lumber of other species or grades is acceptable provided structural and appearance characteristics are equivalent to or better than products specified.

B. Engineered wood products containing added urea-formaldehyde are not permitted.

2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

A. Sizes: Nominal sizes as indicated on drawings, S4S.

B. Moisture Content: S-dry or MC19.

C. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
   1. Lumber: S4S, No. 2 or Standard Grade.
   2. Boards: Standard or No. 3.

2.03 CONSTRUCTION PANELS

A. Subflooring: see S-101 for information.

B. Wood Underlayment: APA Underlayment; plywood, Exposure 2, 1/2 inch thick.
   1. Application: over existing hardwood flooring, beneath carpet tile.
   2. Installation: tongue and groove edges, "floating" to extent possible to minimize damage to hardwood floor, may require slip sheet.

C. Concealed Backing for wall-mounted items- provide backing as required for loading from one of the following:
   1. Dimension Lumber: as noted above
   2. Plywood: as noted below

D. Plywood Applications:
   1. Plywood Concealed From View But Located Within Exterior Enclosure: PS 1, C-C Plugged or better, Exterior grade.
   2. Plywood Exposed to View But Not Exposed to Weather: PS 1, A-D, or better.
   3. Other Locations: PS 1, C-D Plugged or better.

2.04 ACCESSORIES

A. Fasteners and Anchors:
   1. Metal and Finish: Stainless steel for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
   2. Anchors: as follows:
      a. Toggle bolt type for anchorage to hollow masonry.
      b. Expansion shield and lag bolt type for anchorage to solid masonry or concrete.
      c. Bolt or ballistic fastener for anchorages to steel.
   3. Wood Screws: ASME B18.6.1.
   4. Lag Bolts: ASME B18.2.1.
   5. Power Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ACC-ES AC70.

PART 3 EXECUTION

3.01 PREPARATION

A. Coordinate installation of rough carpentry members specified in other sections.

3.02 INSTALLATION - GENERAL

A. Select material sizes to minimize waste.

B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.

3.03 BLOCKING, NAILERS, AND SUPPORTS

A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.

B. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to authorities having jurisdiction may be used in lieu of solid wood blocking.

C. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.

D. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.

E. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.

F. Provide the following specific nonstructural framing and blocking:
   1. Cabinets and shelf supports.
   2. Wall brackets.
   3. Handrails.
   4. Grab bars.
   5. Towel and bath accessories.
   6. Wall-mounted door stops.
   7. Chalkboards, tack boards and marker boards.
   8. Wall paneling and trim.
   9. Joints of rigid wall coverings that occur between studs.
   10. Wall-protection items, including corner guards.
   11. Owner-provided wall-mounted equipment, whether owner-installed or contractor-installed.

3.04 INSTALLATION OF CONSTRUCTION PANELS

A. Underlayment: Secure to subflooring with nails, where absolutely necessary. Glue panels together to minimize number of mechanical fasteners.
   1. Place building paper between floor underlayment and subflooring.

3.05 TOLERANCES

A. Surface Flatness of Floor: 1/8 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

B. Variation from Plane, Other than Floors: 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

3.06 CLEANING

A. Waste Disposal:
   1. Comply with applicable regulations.
   2. Do not burn scrap on project site.
   3. Do not burn scraps that have been pressure treated.
   4. Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or “waste-to-energy” facilities.

B. Do not leave wood, shavings, sawdust, etc. on the ground or buried in fill.

C. Prevent sawdust and wood shavings from entering the storm drainage system.

END OF SECTION

SECTION 09 0190
MAINTENANCE OF FINISHES

PART 1 GENERAL

1.01 SECTION INCLUDES:

A. Refinishing of existing wood components.

B. Patching substrates, including:
   1. Wood
   2. Plaster patching and crack repair

1.02 RELATED REQUIREMENTS:

A. Section 01 3591 - Historic Treatment Procedures

B. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.

C. Section 09 9000 - Painting and Coating: Opaque paint systems

D. Section 09 9300 - Staining and Transparent Finishing: Wood stains and transparent finishes.

1.03 REFERENCES

A. The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings. Washington D.C.: National Park Service, 1995. 5 August 2009.

1.04 DEFINITIONS

A. Refinishing: the process in which existing finishes, including stains and sealers, are removed by stripping and/or sanding to get back to the original material.

B. Stripping: the removal of existing finishes, including stains and sealers, by mechanical, chemical or heat methods.

1.05 SEQUENCING AND SCHEDULING

A. Perform maintenance repainting in the following sequence, which includes work specified in this and other Sections:
   1. Dismantle existing surface-mounted objects and hardware except items indicated to remain in place. Tag items with location identification and protect.
   2. Verify that temporary protections have been installed.
   3. Examine condition of surfaces to be painted.
   4. Remove existing finish to the degree required for each substrate and surface condition of existing paint.
   5. Apply new finish system.
   6. Reinstall dismantled surface-mounted objects and hardware unless otherwise indicated.

1.06 SUBMITTALS

A. See Section 01 3300 - Construction Submittals for submittal procedures.

B. Product Data: For each type of product.
   1. Include recommendations for product application and use (preferred in the form of a matrix/schedule)
   2. Include test data substantiating that products comply with requirements.
   3. Include VOC content

C. Samples: For each type of stain system and each pattern, color, and gloss; in sizes indicated below.
   1. Include stepped Samples defining each separate coat, including fillers and primers. Resubmit until each required sheen, color, and texture is achieved.
   2. Include a list of materials for each coat of each Sample.
   3. Label each Sample for location and application.
   4. Sample Size:

a. Stained or Natural Wood: 12-by-12-inch samples of natural- or stained-wood finish, on species to match existing.

1.07 QUALITY ASSURANCE

A. Color Matching: Custom computer-match finish colors to selected master sample.

B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum five years documented experience.

C. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of experience.

D. Mockups: Within 1 month of contract award, provide a minimum of (3) 4x12" stain color samples on new wood trim, and (1) refinished window casing in Office O3R, for owner and architect approval. The window casings on the west wall of Office O3P shall serve as the approved stain color for all woodwork.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).
   1. Maintain containers in clean condition, free of foreign materials and residue.
   2. Remove rags and waste daily.

1.09 FIELD CONDITIONS

A. Existing Conditions: Determine that surfaces to which finishes are to be applied are even, smooth, sound, clean, dry and free from defects affecting proper application. Correct or report defective surfaces to Architect.

B. Store materials in area of installation for minimum period of 24 hours prior to installation.

PART 2 PRODUCTS

2.01 PREPARATORY CLEANING MATERIALS

A. Water: Potable.

B. Detergent Solution: Solution prepared by mixing 2 cups (0.5 L) of tetrasodium pyrophosphate (TSPP), 1/2 cup (125 mL) of laundry detergent that contains no ammonia, 5 quarts (5 L) of 5 percent sodium hypochlorite bleach, and 15 quarts (15 L) of warm water for every 5 gal. (20 L) of solution required.

2.02 FINISH REMOVERS

A. Manufacturers:
   1. American Building Restoration Products Inc.
   2. Cathedral Stone Products, Inc.
   3. Diedrich Technologies, Inc.
   4. Dumond Chemicals, Inc.
   5. EaCo Chem, Inc.
   6. Hydroclean; Hydrochemical Techniques, Inc.
   7. PROSOCO, Inc.
   8. Shore Corporation
   9. Substitutions: See Section 01 60 00 - Product Requirements.

B. Low-Odor, Solvent-Type Paste Paint Remover: Manufacturer's standard low-odor, water-rinsable, solvent-type paste, gel, or foamed emulsion formulation for removing paint from masonry, stone, wood, plaster, or metal as required to suit Project; and containing no methanol or methylene chloride.

C. Solvent-Type Finish Remover: Manufacturer's standard water-rinsable, solvent-type paste or gel formulation for removing paint or stain from wood as required to suit Project.

2.03 EQUIPMENT

A. Hand-held Orbital Sanders (NO ROTARY OR DISK SANDERS)

B. Sandpaper: 3 grades, finest grade 100.

2.04 PATCHING MATERIALS

A. Wood-Patching Compound: Two-part, epoxy-resin, wood-patching compound; knife-grade formulation as recommended in writing by manufacturer for type of wood repair indicated, tooling time required for the detail of work, and site conditions. Compound shall be designed for filling voids in damaged wood materials that have deteriorated from weathering and decay. Compound shall be capable of filling deep holes and spreading to feather edge.

B. Wood Filler: Solvent base, tinted to match surface finish color.

C. Bonding Compound: Provide type recommended for bonding plaster to solid surfaces, complying with ASTM C932.

D. Reinforcing Mesh: 4.5 oz/sq yd alkali-resistant mesh.

E. Plaster Materials: See Section 09 2400.

2.05 PAINT, STAIN, VARNISH, SEALER

A. See Section 09 9000 - Painting and Coating for paint products and application.

B. See Section 09 9300 - Staining and Transparent Finishing for stain and finish products and application.

PART 3 EXECUTION

3.01 PROTECTION

A. Comply with each manufacturer's written instructions for protecting building and other surfaces against damage from exposure to its products. Prevent chemical solutions from coming into contact with people, motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.
   1. Cover adjacent surfaces with materials that are proven to resist chemical solutions being used unless the solutions will not damage adjacent surfaces. Use protective materials that are UV resistant and waterproof. Apply masking agents to comply with manufacturer's written instructions. Do not apply liquid masking agent to painted or porous surfaces. When no longer needed, promptly remove masking to prevent adhesive staining.
   2. Neutralize and collect alkaline and acid wastes before disposal.

3.02 MAINTENANCE REPAINTING, GENERAL

A. Maintenance Refinishing Appearance Standard: Completed work is to have a uniform appearance as viewed by Architect from building interior at 5 feet (1.5 m) away from finished surface.

B. Execution of the Work: In refinishing surfaces, disturb them as minimally as possible and as follows:
   1. Remove failed coatings and stains.
   2. Verify that substrate surface conditions are suitable for refinishing.
   3. Allow other trades to repair items in place before refinishing.

C. Mechanical Abrasion: Where mechanical abrasion is needed for the work, use gentle methods, such as scraping and lightly hand sanding, that will not abrade softer substrates, reducing clarity of detail.

D. Heat Processes: Do not use torches, heat guns, or heat plates.

3.03 EXAMINATION

A. Examine substrates and conditions, with Installer present, for compliance with requirements for maintenance and refinishing work.

B. Maximum Moisture Content of Substrates: Do not begin application of coatings unless moisture content of exposed surface is below the maximum value recommended in writing by finish manufacturer and not greater than the following maximum values when measured with an electronic moisture meter appropriate to the substrate material:

1. Wood: 15 percent.

C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes.

D. If existing surfaces cannot be prepared to an acceptable condition for proper finishing by using specified surface-preparation methods, notify Architect in writing.

3.04 PREPARATION

A. Remove hardware, covers, plates, and similar items already in place that are removable. If removal is impractical or impossible, provide surface-applied protection before surface preparation and finishing.

3.05 PREPARATORY CLEANING

A. General: Use the gentlest, appropriate method necessary to clean surfaces in preparation for refinishing. Clean all surfaces, corners, contours, and interstices.

B. Detergent Cleaning: Wash surfaces by hand using clean rags, sponges, and soft bristle brushes. Rinse with water applied by clean rags or sponges.

3.06 FINISH REMOVAL

A. Apply finish remover to dry, painted surface with natural-fiber cleaning brush, deep-nap roller, or large paint brush or as recommended in writing by manufacturer.

B. Allow finish remover to remain on surface for period recommended in writing by manufacturer or as determined by preconstruction testing.

C. Scrape off finish and remover.

D. Rinse with cold water to remove chemicals and residue.

E. Use mechanical methods recommended in writing by manufacturer to remove remaining chemicals and finish residue.

3.07 SUBSTRATE REPAIR

A. General: Repair substrate surface defects that are inconsistent with the surface appearance of adjacent materials and finishes.

B. Wood Substrate:
   1. Repair wood defects including dents and gouges more than 1/8 inch (3 mm) in size and all holes and cracks by filling with wood-patching compound and sanding smooth. Reset or remove protruding fasteners.

C. Cementitious Material Substrate:
   1. General: Repair defects including dents and chips more than 1/4 inch (6 mm) in size and all holes and cracks by filling with cementitious patching compound and sanding smooth. Remove protruding fasteners.
   2. New and Bare Plaster: Neutralize surface of plaster with mild acid solution as recommended in writing by paint manufacturer. In lieu of acid neutralization, follow manufacturer's written instruction for primer or transition coat over alkaline plaster surfaces.
   3. Concrete, Cement Plaster, and Other Cementitious Products: Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. If surfaces are too alkaline to paint, correct this condition before painting.

D. Gypsum-Plaster and Gypsum-Board Substrates:
   1. Repair defects including dents and chips more than 1/4 inch (6 mm) in size and all holes and cracks by filling with gypsum-plaster patching compound and sanding smooth. Remove protruding fasteners.
   2. Rout out surface cracks to remove loose, unsound material; fill with patching compound and sand smooth.

3.08 REFINISHING

A. Mask off adjacent surfaces, including vertical surfaces, before beginning sanding.

B. Sand to smooth even finish with no evidence of sander marks.

C. Apply filler and stain and three finish coats.
   1. Apply wood filler paste to open-grain woods, as defined in "MPI Architectural Painting Specification Manual," to produce smooth, glasslike finish.
   2. Apply stain to wood floor to obtain a finish to match the original.
   3. Lightly buff between coats with steel wool, vacuum clean and wipe with damp cloth before applying succeeding coat.
   4. Apply last coat of finish.

END OF SECTION

SECTION 09 3000
TILING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Tile for floor applications (T-#).

B. Tile for wall (T-#) and base (TB-#) applications.

C. Setting materials and grout.

D. Cementitious backer board as floor tile substrate.

E. Non-ceramic trim.

1.02 RELATED REQUIREMENTS

A. Section 07 9200 - Joint Sealants: Sealing joints between tile work and adjacent construction and fixtures.

B. Section 09 0561 - Common Work Results for Flooring Preparation: Concrete slab topical moisture-vapor-reducing treatments.

1.03 REFERENCE STANDARDS

A. ANSI A108.1a - American National Standard Specifications for Installation of Ceramic Tile in the Wet-Set Method, with Portland Cement Mortar.

B. ANSI A108.1b - American National Standard Specifications for Installation of Ceramic Tile on a Cured Portland Cement Mortar Setting Bed with Dry-Set or Latex-Portland Cement Mortar.

C. ANSI A108.1c - Specifications for Contractors Option: Installation of Ceramic Tile in the Wet-Set Method with Portland Cement Mortar or Installation of Ceramic Tile on a Cured Portland Cement Mortar Bed with Dry-Set or Latex-Portland Cement.

D. ANSI A108.4 - American National Standard Specifications for Installation of Ceramic Tile with Organic Adhesives or Water Cleanable Tile-Setting Epoxy Adhesive.

E. ANSI A108.5 - American National Standard Specifications for Installation of Ceramic Tile with Dry-Set Portland Cement Mortar or Latex-Portland Cement Mortar.

F. ANSI A108.6 - American National Standard Specifications for Installation of Ceramic Tile with Chemical Resistant, Water Cleanable Tile-Setting and -Grouting Epoxy.

G. ANSI A108.8 - American National Standard Specifications for Installation of Ceramic Tile with Chemical Resistant Furan Resin Mortar and Grout.

H. ANSI A108.9 - American National Standard Specifications for Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout.

I. ANSI A108.10 - American National Standard Specifications for Installation of Grout in Tilework.

J. ANSI A108.11 - American National Standard Specifications for Interior Installation of Cementitious Backer Units.

K. ANSI A108.12 - American National Standard for Installation of Ceramic Tile with EGP (Exterior glue plywood) Latex-Portland Cement Mortar.

L. ANSI A108.13 - American National Standard for Installation of Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone.

M. ANSI A118.4 - American National Standard Specifications for Modified Dry-Set Cement Mortar.

N. ANSI A118.7 - American National Standard Specifications for High Performance Cement Grouts for Tile Installation.

O. ANSI A118.9 - American National Standard Specifications for Test Methods and Specifications for Cementitious Backer Units.

P. ANSI A118.10 - American National Standard Specifications for Load Bearing, Bonded, Waterproof Membranes For Thin-Set Ceramic Tile And Dimension Stone Installation.

Q. ANSI A118.12 - American National Standard Specifications for Crack Isolation Membranes for Thin-set Ceramic Tile and Dimension Stone Installation.

R. ANSI A118.15 - American National Standard Specifications for Improved Modified Dry-Set Cement Mortar.

S. ANSI A136.1 - American National Standard for Organic Adhesives for Installation of Ceramic Tile.

T. ANSI A137.1 - American National Standard Specifications for Ceramic Tile.

U. ANSI A326.3 - American National Standard Test Method for Measuring Dynamic Coefficient of Friction of Hard Surface Flooring Materials; 2017.

V. ASTM C373 - Standard Test Method for Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products, Ceramic Tiles, and Glass Tiles.

W. ASTM C373 - Standard Test Method for Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products, Ceramic Tiles, and Glass Tiles; 2014a.

X. ASTM C648 - Standard Test Method for Breaking Strength of Ceramic Tile; 2014.

Y. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Tranmission Loss of Building Partitions and Elements; 2009

Z. ASTM E492 - Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine.

AA. TCNA (HB) - Handbook for Ceramic, Glass, and Stone Tile Installation.

1.04 DEFINITIONS

A. Definitions in the ANSI A108 series of tile installation standards and in ANSI A137.1 apply to Work of this Section unless otherwise specified.

1.05 SUBMITTALS

A. See Section 01 3300 - Construction Submittals for submittal procedures.

B. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.
   1. Provide schedule of proposed membrane underlayments, bonding and grouting materials, and other materials recommended by the manufacturer as being acceptable for use in the intended application and with the substrates with which it will come into contact.

C. Shop Drawings: Indicate tile layout, patterns, color arrangement, perimeter conditions, junctions with dissimilar materials, control and expansion joints, thresholds, and setting details.
   1. Submit for each room (floor and/or walls), after field-verification to reflect actual conditions.

D. Samples: Provide two full size tiles of each color selected with respective colored grout sample.

E. Installer's Qualification Statement:
   1. Submit documentation of National Tile Contractors Association (NTCA) or Tile Contractors' Association of America (TCAA) accreditation; www.tile-assn.com/#sle

F. Maintenance Data: Include recommended cleaning methods, cleaning materials, and stain removal methods.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the types of products specified in this section, with minimum five years of documented experience.

B. Installer Qualifications:
   1. Company specializing in performing tile installation, with minimum of five years of documented experience.
   2. Installer Certification:
      a. Ceramic Tile Education Foundation (CTEF): Certified Tile Installer (CTI).

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirements in ANSI A137.1 for labeling packages.

B. Store tile and cementitious materials on elevated platforms, under cover, and in a dry location.

C. Handle tile that has temporary protective coating on exposed surfaces to prevent coated surfaces from contacting backs of edges of other units. If coating does contact bonding surfaces of tile, remove coating from bonding surfaces before setting tile.

D. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

1.08 FIELD CONDITIONS

A. Do not install solvent-based products in an unventilated environment.

B. Maintain ambient and substrate temperature above 50 degrees F and below 100 degrees F during installation and curing of setting materials.

1.09 WARRANTY

A. See Section 01 7700 - Closeout Procedures for additional warranty requirements.

B. Correct defective Work within a five year period after Date of Substantial Completion.

PART 2 PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

A. For floor tile, provide Static Coefficient of Friction of not less than 0.60.

2.02 TILE

A. Manufacturers: Provide Basis of Design manufacturer listed in the Interior Finish Schedule, or a pre-approved standard or custom product from another manufacturers with equivalent performance, material properties, features, general configuration, appearance, and warranty.

B. Manufacturers:
   1. **BASIS OF DESIGN:** Dal-Tile Corporation: www.daltile.com/#sle.
   2. Substitutions: See Section 01 6000 - Product Requirements.

C. Ceramic Mosaic Tile (T-1 thru T-5): ANSI A137.1, standard grade.
   1. Moisture Absorption: 0 to 0.5 percent as tested in accordance with ASTM C373.
   2. Style / Pattern / Color / Finish: as indicated in Finish Schedule in Drawings.
   3. Size/ Install: as indicated in Finish Schedule in Drawings.

D. Porcelain Tile (T-6, TB-1): ANSI A137.1, standard grade.
   1. Moisture Absorption: 0 to 0.5 percent as tested in accordance with ASTM C373.
   2. Style / Pattern / Color / Finish: as indicated in Finish Schedule in Drawings.
   3. Size/ Install: as indicated in Finish Schedule in Drawings.
   4. Trim Units: cove base shapes in sizes indicated.

2.03 TRIM AND ACCESSORIES

A. Non-Ceramic Trim: Material, styles, and dimensions to suit applications described below for setting using tile mortar.
   1. Applications:
      a. Open edges of wall and floor tile.
      b. Transition between floor finishes of different heights.
   2. Products:
      a. **BASIS OF DESIGN:** Schluter-Systems: www.schluter.com/#sle.
      b. Genesis APS International: www.genesis-aps.com/#sle.
      c. Genotek: www.genotek.com..
      d. Profilitec; www.profilitecsolutions.com.
      e. Substitutions: See Section 01 6000 - Product Requirements.
   3. Products:
      a. For use at open edges of tile:

1) Basis of Design: Schluter-SCHIENE: www.schluter.com.
2) Description: L-shaped brushed stainless steel profile with sloped top, anchor leg, and integrated grout joint spacer to accommodate tile thickness specified.

b. For use at transitions between floor tile and concrete or wood floor:
1) Basis of Design: Schluter-RENO-U: www.schluter.com.
2) Description: Brushed stainless steel profile with sloped exposed surface, tapered leading edge, anchor leg, and integrated grout joint spacer to accommodate tile thickness specified.

c. Provide all accessory transition and termination pieces for a complete installation.

2.04 SETTING MATERIALS

A. Provide setting and grout materials from same manufacturer.

B. Improved Latex-Portland Cement Mortar Bond Coat: ANSI A118.15.
1. Products:
a. ARDEX Engineered Cements; S 28: www.ardexamericas.com/#sle.
b. Custom Building Products; Complete Contact-LFT Premium Rapid Setting Large Format Tile Mortar, with Multi-Surface Bonding Primer: www.custombuildingproducts.com/#sle.
c. H.B. Fuller Construction Products, Inc; TEC TotalFlex 150 Universal Mortar: www.tecspecialty.com/#sle.
d. LATICRETE International, Inc; MULTIMAX LITE: www.laticrete.com/#sle.
e. Mapei Corporation; Granirapid System: www.mapei.com/#sle.
f. Substitutions: See Section 01 6000 - Product Requirements.

C. Thin-Set Latex-Portland Cement Mortar Bond Coat for Floor Tile: ANSI A118.4.
1. Applications: Use this type of bond coat where indicated for floor tile.
2. Acceptable Manufacturers and Products:
a. Bostik, Inc.; Ditra-Set Thin-Set: www.bostik-us.com.
b. Custom Building Products; Flexbond Crack Prevention Thin-Set Mortar: www.custombuildingproducts.com.
c. LATICRETE International, Inc; LATICRETE 254 Platinum: www.laticrete.com.
d. Mapei Corporation; Ultraflex 3 Mortar.
e. Merkrete, by Parex USA, Inc; Merkrete 720 Marble Pro: www.merkrete.com.
f. ProSpec, an Oldcastle brand; Permalastic System: www.prospec.com.
g. TEC, H.B. Fuller Construction Products, Inc.; Uncoupling Membrane Mortar: www.tecspecialty.com.
h. Substitutions: See Section 01 6000 - Product Requirements.

D. Organic Adhesive: ANSI A136.1, thinset mastic type.
1. Applications: Tiling directly on existing plaster.
2. Products:
a. ARDEX Engineered Cements; ARDEX D14: www.ardexamericas.com/#sle.
b. Custom Building Products; ReliaBond Ceramic Tile Adhesive - Type 1: www.custombuildingproducts.com/#sle.
c. LATICRETE International, Inc; LATICRETE 15 Premium Mastic: www.laticrete.com/#sle.
d. Substitutions: See Section 01 6000 - Product Requirements.

2.05 GROUTS

A. Provide setting and grout materials from same manufacturer.

B. Polymer Modified Grout: ANSI A118.7 polymer-modified cement grout.
1. Applications: At typical floors, walls, and base.
2. Use sanded grout for joints 1/8 inch wide and larger.
3. Use unsanded grout for joints less than 1/8 inch wide.
4. Colors: As selected by Architect from manufacturer's full line; to match existing.
5. Acceptable Manufacturers and Products:

a. ARDEX Engineered Cements; ARDEX FL: www.ardexamericas.com/#sle.
b. Bostik, Inc.; Dry Tile Grout with Bostik 425 Multi-Purpose Acrylic Latex Additive: www.bostik-us.com.
c. Custom Building Products; Prism Color Consistent Grout: www.custombuildingproducts.com/#sle.
d. H.B. Fuller Construction Products, Inc; TEC AccuColor Plus Grout: www.tecspecialty.com/#sle.
e. LATICRETE International, Inc; LATICRETE PERMACOLOR Grout: www.laticrete.com/#sle.
f. Mapei Corporation; Ultracolor Plus: www.mapei.com.
g. ProSpec, an Oldcastle brand; ProColor Grout: www.prospec.com.
h. Substitutions: See Section 01 6000 - Product Requirements.

2.06 MAINTENANCE MATERIALS

A. Grout Release: Temporary, water-soluble pre-grout coating.
1. Products:
a. Custom Building Products; Aqua Mix Grout Release: www.custombuildingproducts.com/#sle.
b. Substitutions: See Section 01 6000 - Product Requirements.

2.07 ACCESSORY MATERIALS

A. Waterproofing Membrane at Floors: Specifically designed for bonding to cementitious substrate under thick mortar bed or thin-set tile; complying with ANSI A118.10.
1. Crack Resistance: No failure at 1/16 inch gap, minimum; comply with ANSI A118.12.
2. Fluid or Trowel Applied Type:
a. Material: Synthetic rubber or Acrylic.
b. Thickness: 25 mils, minimum, dry film thickness.
c. Products:
1) ARDEX Engineered Cements; ARDEX 8+9: www.ardexamericas.com/#sle.
2) Custom Building Products; RedGard Crack Prevention and Waterproofing Membrane: www.custombuildingproducts.com/#sle.
3) H.B. Fuller Construction Products, Inc; TEC HydraFlex Waterproofing Crack Isolation Membrane: www.tecspecialty.com/#sle.
4) LATICRETE International, Inc; LATICRETE HYDRO BAN: www.laticrete.com/#sle.
5) Mapei Corporation; Mapelastic AquaDefense: www.mapei.com/#sle.
6) Merkrete, by Parex USA, Inc; Merkrete Hydro Guard 1: www.merkrete.com/#sle.
7) Sika Corp; SikaTile 100 Moisture Guard: www.sika.com/#sle.
8) USG Corporation; Durock Brand Waterproofing Membrane: www.usg.com/#sle.
9) Substitutions: See Section 01 6000 - Product Requirements.

B. Backer Board: Cementitious type complying with ANSI A118.9; high density, glass fiber reinforced, **1/2 inch thick**; 2 inch wide coated glass fiber tape for joints and corners.
1. Products:
a. Custom Building Products; WonderBoard Lite Backerboard: www.custombuildingproducts.com/#sle.
b. Substitutions: See Section 01 6000 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of Work and are ready to receive tile.

B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of Work, are dust-free, and are ready to receive tile.

C. Verify that subfloor surfaces are dust free and free of substances that could impair bonding of setting materials to subfloor surfaces.

D. Verify that required floor-mounted utilities are in correct locations.

E. Verify topical moisture-vapor-reducing treatments have been installed.

F. Proceed only when unsatisfactory conditions have been corrected in a manner complying with the Contract Documents. Starting work within a particular area will be construed as acceptance.

3.02 PREPARATION

A. General: Comply with manufacturer's instructions, recommendations, and specifications for cleaning and surface preparation. Surfaces shall have no defects, contaminants, or errors which would result in poor or potentially defective installation or would cause latent defects in Work.

B. Protect surrounding work from damage.

C. Vacuum clean surfaces and damp clean.

D. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.

E. Install backer board in accordance with ANSI A108.11 and board manufacturer's instructions. Tape joints and corners, cover with skim coat of setting material to a feather edge.

3.03 INSTALLATION - GENERAL

A. Install tile and grout in accordance with applicable requirements of ANSI A108.1 through A108.13, manufacturer's instructions, and TCNA Handbook recommendations.

B. Lay tile to pattern indicated on Drawings. Do not interrupt tile pattern through openings.

C. Cut and fit tile to penetrations through tile, leaving sealant joint space.

D. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make grout joints without voids, cracks, excess mortar or excess grout, or too little grout. Joints shall be 1/8 inch wide.

E. Install non-ceramic trim in accordance with manufacturer's instructions.

F. Sound tile after setting. Replace hollow sounding units.

G. Keep control and expansion joints free of mortar, grout, and adhesive.

H. Prior to grouting, allow installation to completely cure; minimum of 48 hours.

I. Grout tile joints unless otherwise indicated.

J. At changes in plane and tile-to-tile control joints, use tile sealant instead of grout, with either bond breaker tape or backer rod as appropriate to prevent three-sided bonding.

K. Apply sealant to junction of tile and dissimilar materials and junction of dissimilar planes.

3.04 INSTALLATION - FLOORS - THIN-SET METHOD

A. ~~Over wood substrates, install in accordance with~~ TCNA (HB) ~~Method F142, with polymer-modified cement grout, unless otherwise indicated.~~

B. Over wood substrate with backer board underlayment, install in accordance with TCNA (HB) Method F144, for cementitious backerboards, with standard grout.

3.05 INSTALLATION - WALL AND BASE TILE

A. Over solid plaster install in accordance with TCNA (HB) Method W223, organic adhesive.

B. Over coated glass mat backer board on studs, install in accordance with TCNA (HB) Method W245.

C. At Typical Walls: Over glass-mat-faced tile backer board on metal studs, install in accordance with TCNA Handbook Method W245, thin-set with latex-Portland cement mortar for large format tile, with polymer-modified cement grout.

3.06 MOVEMENT JOINTS

A. Movement Joints, General: Installation Quality Standard: In accordance with TCNA Movement Joint Design Essentials EJ171 and as specified below.

B. Floor Joints:
   1. General Requirements:
      a. Isolate tile work that abuts a restraining structure or assembly.
   2. Schedule of Sealant Products and Locations:
      a. Latex-Portland Cement Grouted Floors: Install floor joint sealant with backer rod at horizontal joints in mortar and grout setting conditions.

C. Interior Floor Joint Installation Schedule: Seal interior floor movement joints, as defined by TCNA, according to following schedule:
   1. Isolation Joints: Floor joint sealant and backer rod.
   2. Perimeter Joints between Wall and Floors: Floor joint sealant with backer tape.

3.07 FIELD QUALITY CONTROL

A. Independently test floor tile surfaces for verification of enhanced slip resistance (DCOF) according to the AcuTest Method per ANSI A137.1 and ANSI A326.3; surfaces shall be labeled "safe" by NSFI (National Floor Safety Institute) standards.
   1. Provide additional treatments of finishing as required to achieve desired results.

3.08 CLEANING AND PROTECTION

A. Clean tile and grout surfaces.

3.09 PROTECTION

A. Do not permit traffic over finished floor surfaces for 7 days after installation or as recommended by manufacturer. Protect tile through Date of Substantial Completion.

3.10 DEMONSTRATION

A. Cleaning and Maintenance Training: Provide instruction to Owner's personnel for cleaning and maintenance of installed work, including methods and frequency for maintaining optimum condition under anticipated use; include precautions against cleaning materials and methods which may be detrimental to finishes and performance.

END OF SECTION

SECTION 09 9300
STAINING AND TRANSPARENT FINISHING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Field application of stains and transparent finishes.

1.02 RELATED REQUIREMENTS

A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.

B. Section 09 9000 - Painting and Coating: Opaque finishes for substrates.

1.03 DEFINITIONS

A. Comply with ASTM D16 for interpretation of terms used in this section.

1.04 REFERENCE STANDARDS

A. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications.

B. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials.

1.05 SUBMITTALS

A. See Section 01 3300 - Construction Submittals for submittal procedures.

B. Product Data: Provide complete list of products to be used, with the following information for each:
   1. Manufacturer's name, product name and catalog number, and general product category.

C. Samples: Submit two samples, illustrating selected colors and sheens for each system with specified coats cascaded. Submit on actual wood substrate to be finished, 6 by 6 inch in size.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section, with at least three years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of stain or transparent finish, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Stain and Transparent Finish Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.08 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by manufacturer of stains and transparent finishes.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

C. Do not apply materials when relative humidity exceeds 85 percent, at temperatures less than 5 degrees F above the dew point, or to damp or wet surfaces.

D. Minimum Application Temperature: 50 degrees F unless required otherwise by manufacturer's instructions.

E. Provide lighting level of 80 fc measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide finishes from the same manufacturer to the greatest extent possible.

1. In the event that a single manufacturer cannot provide specified products, minor exceptions will be permitted provided approval by Architect is obtained using the specified procedures for substitutions.

B. Transparent Finishes:
1. Benjamin Moore
2. Diamond Vogel
3. The Pittsburgh Paints Co. (PPC); www.ppgpaints.com
4. Sherwin-Williams Company: www.sherwin-williams.com/#sle.

C. Stains:
1. Any of those listed above.
2. Minwax.

D. Substitutions: See Section 01 6000 - Product Requirements.

2.02 STAINS AND TRANSPARENT FINISHES - GENERAL

A. Finishes:
1. Provide finishes capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
2. Provide materials compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
3. Supply each finish material in quantity required to complete entire project's work from a single production run.
4. Do not reduce, thin, or dilute finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

B. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect from the manufacturer's full line.

C. Colors: as required to match existing.

2.03 INTERIOR STAIN AND TRANSPARENT FINISH SYSTEMS

A. Sponge wood with clean water and a cellulose sponge. When dry, sand with 22A sandpaper. Remove sanding dust with a clean rag dampened with tuluol.

B. Open-Grain Wood Filler (M.P.I. #91): Factory-formulated paste wood filler applied at spreading rate recommended by manufacturer.
1. Benjamin Moore; Benwood Paste Wood Filler No. 238.
2. Diamond Vogel: Old Masters Woodgrain Filler.
3. Minwax: Stainable Wood Filler
4. PPC; Old Masters Woodgrain Filler.
5. Sherwin-Williams; Carpenter’s Wood Filler.

C. Interior Wood Stain (M.P.I. #90): Factory-formulated alkyd-based penetrating wood stain for interior application applied at spreading rate recommended by manufacturer.
1. Benjamin Moore; Benwood Penetrating Stain No. 234.
2. Diamond Vogel: Old Masters Penetrating Stain.
3. S-W Minwax: Performance Series Tintable Wood Stain
4. PPC; Varathane Interior Semi-Transparent Oil Stain Series.
5. ~~Sherwin-Williams; Wood Classics Interior Oil Stain A-48 Series~~.

D. Clear Sanding Sealer (under waterborne polyurethane): Factory-formulated fast-drying clear wood sealer applied at spreading rate recommended by manufacturer but not less than 1.0 mils.
1. Benjamin Moore; thinned Stays Clear Acrylic Polyurethane No. 423, Satin.
2. Diamond Vogel: Old Masters H2O Acrylic Sanding Sealer..
3. S-W Minwax: Performance Series Fast-Dry Sanding Sealer
4. PPC; Varathen Universal WB Sanding Sealer.
5. ~~Sherwin-Williams; thinned Wood Classics Waterborne Polyurethane Satin, A68 Series~~.

E. Interior Waterborne Clear Satin Polyurethane Varnish (M.P.I. #128): Factory-formulated clear

satin acrylic-based polyurethane varnish. Applied to result in a dry film thickness of not less than 1.0 mils per coat.

1. Benjamin Moore; Stays Clear Acrylic Polyurethane No. 423, Satin.
2. Diamond Vogel: Old Masters H2O Polyurethane.
3. S-W Minwax: Waterbased Oil-Modified Polyurethane or Polycrylic Protective Finish
4. PPC; Varathane Satin Acrylic Clear Polyurethane.
5. ~~Sherwin-Williams; Wood Classics Waterborne Polyurethane Satin, A68 Series~~.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.

C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

D. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
   1. Wood: 15 percent, measured in accordance with ASTM D4442.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

D. Seal surfaces that might cause bleed through or staining of topcoat.

E. Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.
   1. Paint Finish: see Section 09 9000 - Painting and Coating.

F. Wood Surfaces to Receive Transparent Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats. Prime concealed surfaces with gloss varnish reduced 25 percent with thinner.

3.03 APPLICATION

A. Apply products in accordance with manufacturer's written instructions.

B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

C. Apply each coat to uniform appearance in thicknesses specified by manufacturer.

D. Sand wood surfaces lightly between coats to achieve required finish.

E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

F. Wood to Receive Transparent Finishes: Tint fillers to match wood. Work fillers into the grain before set. Wipe excess from surface.

G. Reinstall items removed prior to finishing.

3.04 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

END OF SECTION

SECTION 23 0713

DUCT INSULATION (ADDENDUM #1)

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fiberglass (flexible duct wrap)

1.02 RELATED SECTIONS

A. Specification Section 23 3100 - HVAC Ducts and Casings

B. Specification Section 23 3300 - Air Duct Accessories

1.03 REFERENCES

A. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate

B. ASTM C518 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

C. ASTM C921 - Standard Practice for Determining the Properties of Jacketing Materials for Thermal Insulation

D. ASTM C1071 - Standard Specification for Thermal and Acoustical Insulation (Fiberglass, Duct Lining Material)

E. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials

F. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials

G. ASTM E162 - Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source

H. ASTM C612: Standard Specification for Mineral Fiber Block and Board Thermal Insulation

I. ASTM C1290: Standard Specification for Flexible Fibrous Glass Blanket Insulation Used to Externally Insulate HVAC Ducts

J. ASTM C1338: Standard Test Method for Determining Fungi Resistance of Insulation Materials and Facings

K. NAIMA National Insulation Standards

L. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials

M. SMACNA - HVAC Duct Construction Standards - Metal and Flexible

N. UL 723 - Standard for Test for Surface Burning Characteristics of Building Materials

1.04 SUBMITTALS

A. Product Data: Provide product description, thermal characteristics, and list of materials and thickness for each service and locations.

B. Manufacturer's Installation Instructions: Indicate procedures that ensure acceptable workmanship and installation standards will be achieved.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years experience.

B. Applicator Qualifications: Company specializing in performing the work of this section approved by manufacturer.

1.06 REGULATORY REQUIREMENTS

A. Materials: Flame spread/smoke developed rating of 25/50 in accordance with ASTM E84.

B. Identification: External duct insulation and factory insulated flexible duct shall be legibly printed or identified at intervals not greater than 36 inch with name of manufacturer, the thermal resistance R-value at the specified thickness; and the flame spread and smoke developed indexes of the composite material.

1.07 DELIVERY, STORAGE AND PROTECTION

A. Deliver, store, protect and handle products to site.

B. Accept materials on site in original factory packaging, labeled with manufacturer's identification, including product density and thickness.

C. Protect insulation from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original wrapping.

1.08 ENVIRONMENTAL REQUIREMENTS

A. Maintain ambient temperatures and conditions required by manufacturers of adhesives, mastics and insulation cements.

B. Maintain temperature during and after installation for minimum period of 24 hours.

PART 2 PRODUCTS

2.01 FIBERGLASS (FLEXIBLE DUCT WRAP)

A. Manufacturers:
   1. Owens Corning
   2. Knauff
   3. Johns Manville
   4. CertainTeed
   5. Engineer approved equal.

B. Insulation: ASTM C1290; flexible, noncombustible blanket.
   1. "K" Value: ASTM C518, 0.27 at 75 deg F.
   2. Installed R-value (compressed to 25%) for 1-1/2": 4.5
   3. Maximum Service Temperature: ASTM C411; 250 deg F.
   4. Maximum Moisture Absorption: ASTM C1104; 5% by weight
   5. Density: 1.0 lb./cu. ft. (0.75 lb/cu ft for attic insulation)
   6. Microbial Growth: ASTM C1338; does not support the growth of mold, fungi and bacteria.
   7. Maximum Flame Spread/Smoke Developed Index: ASTM E84; 25/50

C. Vapor Barrier Jacket:
   1. Kraft paper reinforced with fiberglass yarn and bonded to aluminized film.
   2. Maximum Moisture Vapor Transmission: ASTM E96; 0.02 perm.

D. Vapor Barrier Tape Pressure sensitive tape approved by the manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that ductwork has been tested before applying insulation materials.

B. Verify that surfaces are clean, foreign material removed and dry.

3.02 INSTALLATION

A. Install in accordance with manufacturer’s instructions.

B. Insulated Ductwork Conveying Air Below Ambient Temperature:
   1. Provide insulation with vapor barrier jackets.
   2. Finish with tape and vapor barrier jacket.
   3. Continue insulation through walls, sleeves, hangers and other duct penetrations.
   4. Insulate entire system including fittings, joints, flanges, fire dampers, flexible connections, expansion joints, reheat coils, and any other item exposed to ductwork air temperature.

C. Insulated Ductwork Conveying Air Above Ambient Temperature:
   1. Provide with standard vapor barrier jacket.
   2. Insulate fittings and joints. Where service access is required, bevel and seal ends of insulation.

D. Exterior Ductwork Insulation Application:

1. Secure insulation with vapor barrier with adhesive. Seal vapor barrier jacket joints with vapor barrier tape to match jacket.
2. Install without sag on underside of ductwork. Use adhesive or mechanical fasteners where necessary to prevent sagging.
3. Lift ductwork off trapeze hangers and insert spacers.
4. Seal vapor barrier penetrations with vapor barrier adhesive and tape.
5. Stop and point insulation around access doors and damper operators to allow operation without disturbing wrapping.

3.03 SCHEDULES

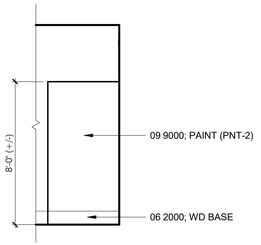
FIBERGLASS FLEXIBLE DUCT WRAP

DUCTWORK	THICKNESS
Supply, Return, Outside Air, Exhaust Ducts (Attic)	2"

END OF SECTION 23 0713

TB Version 16.4

01
ADD



D3 HALLWAY 03M - NORTH
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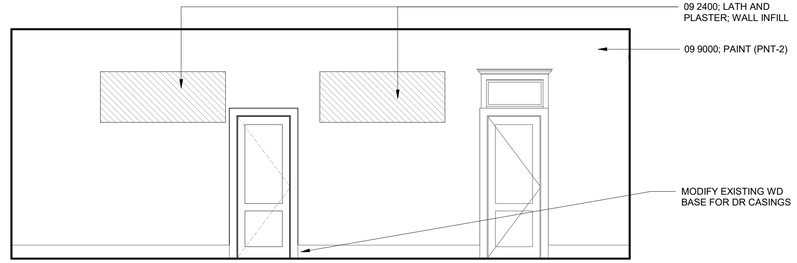

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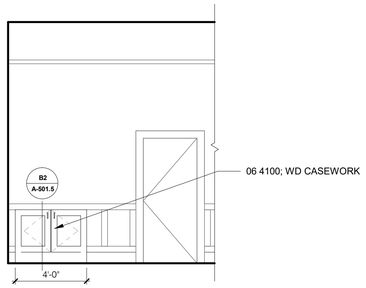

C1 COURTROOM 03A - WEST
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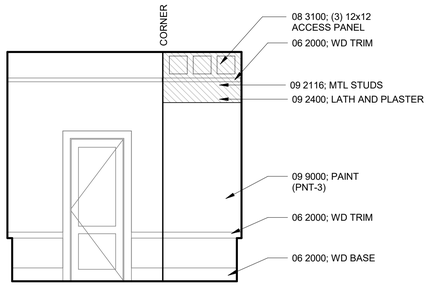

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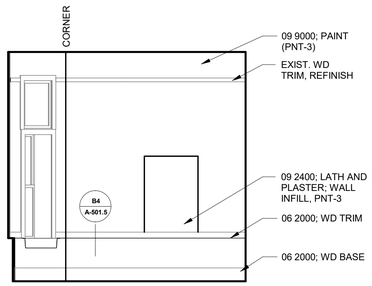
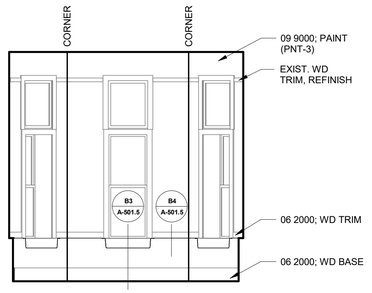


C3 OFFICE 03N - NORTH
1/4" = 1'-0"



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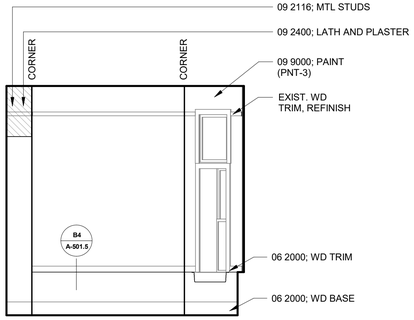

C5 OFFICE 03N - SOUTH
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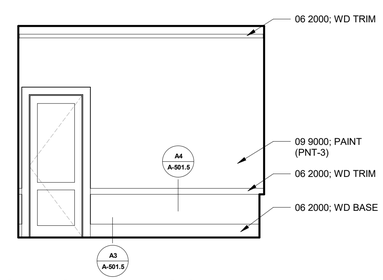

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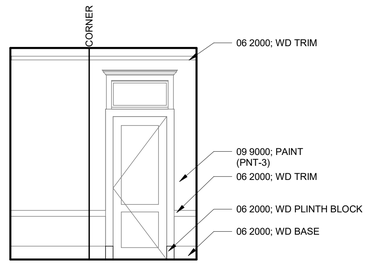
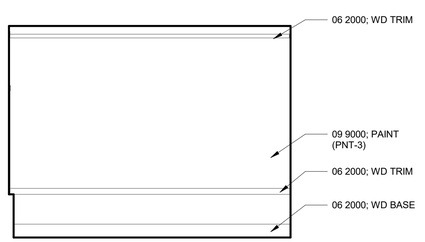
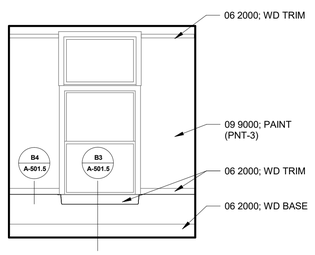


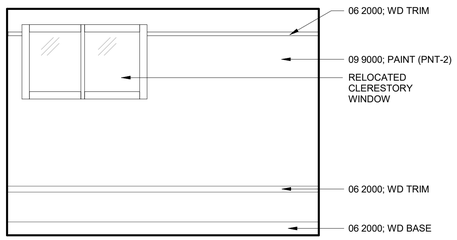
B3 OFFICE 03R - EAST
1/4" = 1'-0"



B4 OFFICE 03R - NORTH
1/4" = 1'-0"

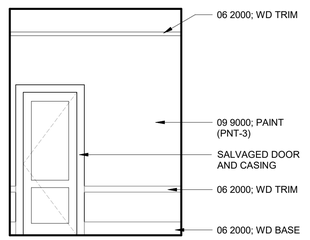


B5 OFFICE 03R - WEST
1/4" = 1'-0"

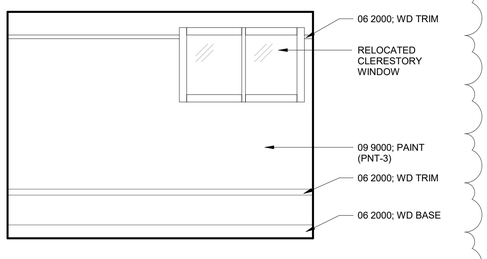


A2 OFFICE 03Q - NORTH
1/4" = 1'-0"

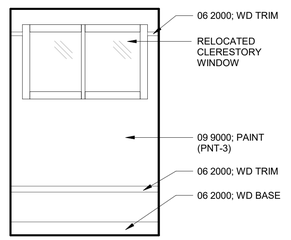
02
ADD



A3 MULTI-USE 03P - EAST
1/4" = 1'-0"



A4 MULTI-USE 03P - SOUTH, OFFICE 03U SIM.
1/4" = 1'-0"



A5 OFFICE 03O - SOUTH
1/4" = 1'-0"

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NEUMANN MONSON ARCHITECTS

PROJECT NAME

JOHNSON COUNTY COURTHOUSE THIRD LEVEL OFFICE RENOVATION

OWNER
JOHNSON COUNTY
913 South Dubuque Street
Iowa City, Iowa 52240

PROJECT NO. 18.112

ISSUE

DATE	DESCRIPTION
12.05.2024	BIDDING DOCUMENTS
12.19.2024	ADD 01
01.03.2025	ADD 02

SHEET NAME
INTERIOR ELEVATIONS

SHEET NUMBER
A-411.5

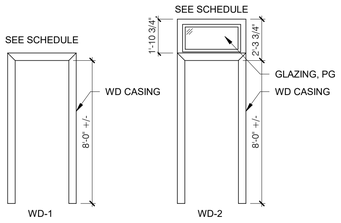
TB Version 16.4

DOOR SCHEDULE

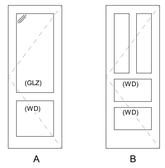
No.	ROOM	DOOR SIZE		DOOR			FRAME		NOTES
		WIDTH	HEIGHT	TYPE	MAT	GLAZE	TYPE	MAT	
03L	HALLWAY	3'-0"	8'-0"	--					1
03M	HALLWAY	3'-0"	8'-0"	--					1
03N	OFFICE	3'-0"	8'-0"	--					1
03O	OFFICE	3'-0"	8'-0"	--					1
03P	MULTI-USE	3'-0"	8'-0"	--					1,2
03Q	OFFICE	3'-0"	8'-0"	--					1
03R	OFFICE	3'-0"	8'-0"	B	WD		WD-1	WD	
03S	BREAKROOM	3'-0"	8'-0"	--					1
03T	RR	3'-0"	8'-0"	--					1,3
03U	OFFICE	3'-0"	8'-0"	A	WD	PG	WD-2	WD	
03V	OFFICE	3'-0"	8'-0"	--					1

DOOR SCHEDULE NOTES:

1. REFINISH ALL SIDES OF EXISTING DOOR AND TRANSOM PANEL, FRAME, AND CASINGS FOR UNIFORM APPEARANCE TO MATCH ARCH SELECTED STAIN COLOR
2. REINSTALL SALVAGED DOOR AND CASINGS; INSTALL NEW FRAME AND WOOD PLINTH BLOCKS EA. SIDE
3. AT RR SIDE, INSTALL NEW WOOD CASING AT JAMB AND HEAD TO MATCH HISTORIC TRIM PROFILE



DOOR FRAME TYPES
1/4" = 1'-0"



DOOR PANEL TYPES
1/4" = 1'-0"

GLAZING TYPES:

TG = TRANSPARENT GLASS
PG = PATTERNED GLASS

01 ADD

INTERIOR FINISHES

KEY	MATERIAL	MANUF.	DESCRIPTION	COMMENTS
PLAM-1	06 4100- PLASTIC LAMINATE	FENIX	J0748 BEIGE ARIZONA, COLORCORE	CASEWORK AT BREAKROOM
SSM-1	06 4100- SOLID SURFACE	FORMICA	744 CREMA TERRAZZO, THICKNESS: 1/2"	COUNTERTOP AT BREAKROOM
T-1	09 3000- TILE	DALTILE	KEYSTONE, 1" HEXAGON MOSAIC, COLOR: ALMOND	FIELD TILE AT RESTROOM AND CENTER OF FLORAL DETAIL
T-2	09 3000- TILE	DALTILE	KEYSTONE, 1" HEXAGON MOSAIC, COLOR: URBAN PUTTY	FLORAL DETAIL TILE AT RESTROOM
T-3	09 3000- TILE	DALTILE	KEYSTONE, 1" X 1" MOSAIC, COLOR: BROWNBERRY	ACCENT TILE AT RESTROOM BOARDER
T-4	09 3000- TILE	DALTILE	KEYSTONE, 1" X 1" MOSAIC, COLOR: ALMOND	ACCENT TILE AT RESTROOM BOARDER
T-5	09 3000- TILE	DALTILE	KEYSTONE, 1" X 1" MOSAIC, COLOR: URBAN PUTTY	ACCENT TILE AT RESTROOM BOARDER
T-6	09 3000- TILE	DALTILE	COLOR WHEEL, 3" X 6", COLOR: ARTIC WHITE, MATTE	WALL TILE AT RESTROOM
TB-1	09 3000- TILE	DALTILE	COLOR WHEEL, 6" X 6" COVE BASE, COLOR: ARTIC WHITE, MATTE	WALL BASE AT RESTROOM
SATC	09 5100- ACOUSTICAL CEILING	ARMSTRONG	DUNE, 24" X24", COLOR: WHITE	AT LOCATIONS SCHEDULED
CPT-1	09 6813- CARPET TILE	INTERFACE	COLLECTION: CEREMONY, STLYE: CE171 127950AK00, COLOR: BENTO 104951, SIZE 25CM X 1M, INSTALLATION: ASHLAR	AT LOCATIONS SCHEDULED
EPNT-1	09 9000- PAINT	SHERWIN WILLIAMS	EPOXY, SW 7637 OYSTER WHITE	AT LOCATIONS SCHEDULED
PNT-2	09 9000- PAINT	SHERWIN WILLIAMS	SW 7637 OYSTER WHITE	AT LOCATIONS SCHEDULED
PNT-3	09 9000- PAINT	SHERWIN WILLIAMS	SW 7036 ACCESSIBLE BEIGE	AT LOCATIONS SCHEDULED
SHD-1	12 2400- WINDOW SHADES	SWF CONTRACT	CROSSHATCH R, COLOR: EGGSHELL/FOG C8212, OPENNESS: 3%	WINDOW TREATMENT THROUGHOUT

ROOM FINISH SCHEDULE

ROOM No.	ROOM NAME	FLOOR	BASE	WALL	SPECIALTY WALL FINISH	CEILING	COMMENTS
03L	HALLWAY	CPT-1	WD	PNT-2	--	PNT	REFER TO NOTES 7,8,10
03M	HALLWAY	CPT-1	WD	PNT-2	--	PNT	REFER TO NOTES 8,10
03N	OFFICE	CPT-1	WD	PNT-3	--	PNT	REFER TO NOTES 1,2,3,4,8,10,11
03O	OFFICE	CPT-1	WD	PNT-3	--	PNT	REFER TO NOTES 5,8,10
03P	MULTI-USE	CPT-1	WD	PNT-3	--	PNT	REFER TO NOTES 1,5,8,10
03Q	OFFICE	CPT-1	WD	PNT-3	--	PNT	REFER TO NOTES 1,5,8,10,12
03R	OFFICE	CPT-1	WD	PNT-3	--	PNT	REFER TO NOTES 2,3,4,9,10
03S	BREAKROOM	EXIST	WD	PNT-2	--	SATC	REFER TO NOTE 1
03T	RR	T-1, T-2, T-3, T-4, T-5	TB-1	EPNT-1	T-6	SATC	REFER TO ELEVATIONS FOR EXTENT OF T-6, REFER TO NOTES 1,2,6,13
03U	OFFICE	CPT-1	WD	PNT-3	--	PNT	REFER TO NOTES 5,8,10
03V	OFFICE	CPT-1	WD	PNT-3	--	PNT	REFER TO NOTES 2,3,4,9,10

ROOM FINISH SCHEDULE GENERAL NOTES:

A. ALL EXISTING WOOD TRIM SHALL BE REUSED, INCLUDING BASE, RUNNING TRIM, AND DOOR CASINGS; REFINISH ALL WOOD TRIM TO MATCH APPROVED STAIN COLOR. CONTRACTOR'S OPTION TO PROVIDE AND INSTALL NEW TO MATCH HISTORIC PROFILES; FINISH TO MATCH APPROVED STAIN COLOR.

B. FILL AND PATCH ALL DENTS, AND OTHER IMPERFECTIONS IN EXISTING AND NEW GYPSUM BOARD AND PLASTER SURFACES PRIOR TO PAINTING

C. REMOVE AND REINSTALL WD BASE SHOE TRIM FOR CARPET INSTALLATION

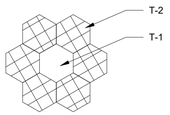
D. REMOVE AND REINSTALL ALL ITEMS FROM WALLS FOR PLASTER REFINISHING, INCLUDING COVER PLATES, VISUAL BOARDS, ETC.

E. REFINISH ALL EXISTING WOOD DOORS FOR UNIFORM APPEARANCE; REMOVE AND REINSTALL ALL HARDWARE, ETC. TO ACHIEVE THE WORK.

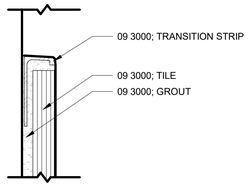
ROOM FINISH SCHEDULE SPECIFIC NOTES:

1. REPAIR AND PATCH ALL DENTS, CHIPS, AND CRACKS IN WALL SURFACES AND INSTALL SKIM COAT, MIN. 3MM, FOR UNIFORM APPEARANCE
2. REFINISH ALL WOOD TRIM TO MATCH LIGHTER COLOR IN OFFICE 03P OR PROVIDE NEW TO MATCH PROFILES
3. PROVIDE AND INSTALL WOOD APRON TRIM AT EXTERIOR WINDOW SILLS TO MATCH TRIM IN OFFICE 03P
4. PROVIDE AND INSTALL WOOD CHAIR RAIL TRIM FULL PERIMETER, MATCH EXISTING PROFILE
5. PROVIDE AND INSTALL WOOD RUNNING TRIM AT NEW WALL TO MATCH EXISTING
6. REMOVE JAMB AND HEAD CASINGS; PROVIDE AND INSTALL CASINGS TO MATCH TYP. DOOR CASINGS
7. PAINT WOOD ATTIC ACCESS DOOR AND PERIMETER TRIM
8. REPAIR AND PATCH ALL DENTS, CHIPS, AND CRACKS IN CEILING SURFACES AND INSTALL SKIM COAT, MIN. 3MM, FOR UNIFORM APPEARANCE
9. PROVIDE AND INSTALL SUSPENSION SYSTEM, AND GYPSUM CEILING SYSTEM
10. REFINISH EXISTING WD FLOOR; SEE ALTERNATE 1
11. INSTALL LATH AND PLASTER WALL UP TO ORIGINAL CEILING ELEVATION, FULL PERIMETER
12. REPLACE WOOD FLOOR BOARDS WHERE WALL WAS REMOVED; NEW INFILL SHALL MATCH EXISTING LENGTH AND PATTERN OF EXISTING
13. INCLUDE 4 FLORETTES IN FLOOR TILING.

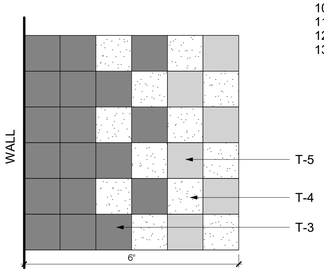
01 ADD



B1 FLORAL ACCENT @ RESTROOM
12" = 1'-0"

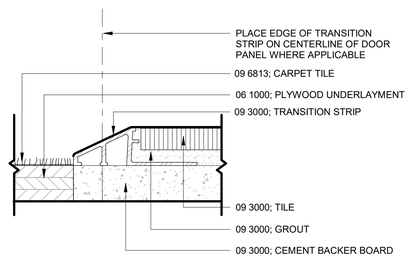


B2 SECT DTL @ TILE EDGE
12" = 1'-0"

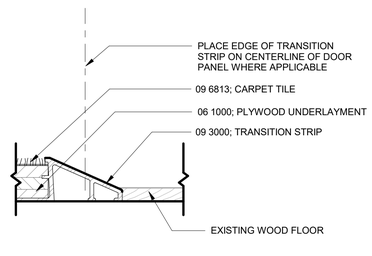


B3 BORDER DETAIL @ RESTROOM
6" = 1'-0"

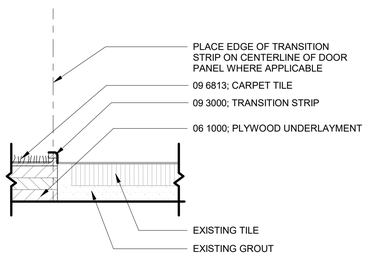
02 ADD



A1 SECT DTL @ TILE/CPT
12" = 1'-0"



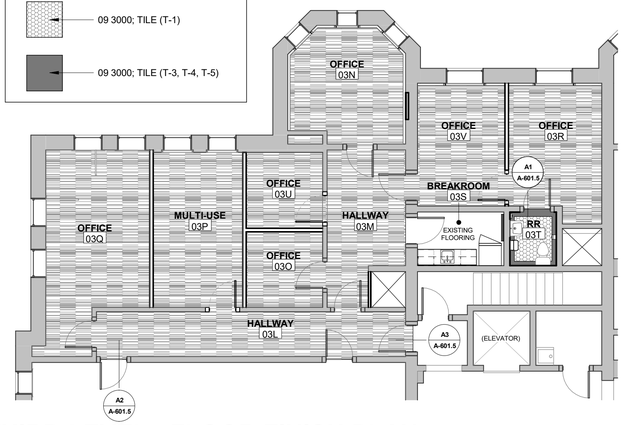
A2 SECT DTL @ CPT/ EXIST. WD
12" = 1'-0"



A3 SECT DTL @ CPT/ EXIST. TILE
12" = 1'-0"

FLOOR FINISH LEGEND

09 6813; CARPET TILE (CPT-1)
09 3000; TILE (T-1)
09 3000; TILE (T-3, T-4, T-5)



A4 THIRD LEVEL - FLOOR FINISH PLAN
1/8" = 1'-0"

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NEUMANN MONSON ARCHITECTS

PROJECT NAME

JOHNSON COUNTY COURTHOUSE THIRD LEVEL OFFICE RENOVATION

OWNER
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Iowa City, Iowa 52240

PROJECT NO. 18.112

ISSUE

DATE	DESCRIPTION
12.05.2024	BIDDING DOCUMENTS
12.19.2024	ADD 01
01.03.2025	ADD 02

SHEET NAME

DOOR AND FINISH SCHEDULE

SHEET NUMBER

A-601.5