

SECTION 09255

GYPSUM BOARD ASSEMBLIES

A. ACCEPTABLE MANUFACTURERS

1. Steel Framing:
 - a. Clark Steel Framing Systems,
 - b. Dietrich Industries, Inc.,
 - c. Marino Ware,
 - d. Or as approved.
2. Gypsum Board and Related Products:
 - a. G-P Gypsum Corp.,
 - b. National Gypsum Company,
 - c. United States Gypsum Co.,
 - d. Or as approved.

B. ASSEMBLY PERFORMANCE REQUIREMENTS

1. Sound Transmission Characteristics: For gypsum board assemblies with STC ratings, provide materials and construction identical to those of assemblies whose STC ratings were determined according to ASTM E 90 and classified according to ASTM E 413 by a qualified independent testing agency.
2. Fire-Test-Response Characteristics: Where fire-resistance-rated gypsum board assemblies are indicated, provide gypsum board assemblies that comply with the following requirements:
 - a. Fire-Resistance Ratings: As indicated by GA File Numbers in GA-600 "Fire Resistance Design Manual" or design designations in UL "Fire Resistance Directory", FM, or in the listing of another testing and inspecting agency acceptable to authorities having jurisdiction.
 - b. Gypsum board assemblies indicated are identical to assemblies tested for fire resistance according to ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

C. STEEL FRAMING COMPONENTS FOR SUSPENDED AND FURRED CEILING

1. General: Provide components complying with ASTM C 754 for conditions indicated.
2. Wire Ties: ASTM A 641, Class 1 zinc coating, soft temper, 0.062 inch thick.
3. Wire Hangers: ASTM A 641, Class 1 zinc coating, soft temper, 0.162 inch diameter.
4. Hanger Rods: Mild steel and zinc coated or protected with rust-inhibitive paint.
5. Channels: Cold-rolled steel, 0.0598-inch minimum thickness of base (uncoated) metal and 7/16-inch-wide flanges, and as follows:
 - a. Carrying Channels: 1-1/2 inches deep, 475 lb/1000 feet, unless otherwise indicated.
 - b. Furring Channels: 3/4 inch deep, 300 lb/1000 feet, unless otherwise indicated.
 - c. Finish: Rust-inhibitive paint, unless otherwise indicated.
 - d. Finish: ASTM A 653, G 60 hot-dip galvanized coating for framing for exterior soffits and where indicated.
6. Steel Rigid Furring Channels: ASTM C 645, hat shaped, depth of 7/8 inch, and minimum thickness of base (uncoated) metal as follows:
 - a. Thickness: 0.0179 inch, unless otherwise indicated.
 - b. Protective Coating: ASTM A 653, G 40 hot-dip galvanized coating.
 - c. Protective Coating: ASTM A 653, G 40 hot-dip galvanized coating for framing for exterior soffits and ceiling suspension members in areas within 10 feet of exterior walls.
7. Grid Suspension System for Interior Ceilings: ASTM C 645, manufacturer's standard direct-hung grid suspension system composed of main beams and cross-furring members that interlock to form a modular supporting network.

D. STEEL FRAMING FOR WALLS AND PARTITIONS

1. General: Provide steel framing members complying with the following requirements:
 - a. Protective Coating: ASTM A 653, G 40 hot-dip galvanized coating for framing members attached to and within 10 feet of exterior walls.
2. Steel Studs and Runners: ASTM C 645, with flange edges of studs bent back 90 degrees and doubled over to form 3/16-inch-wide minimum lip (return), and complying with the following requirements for minimum thickness of base (uncoated) metal and for depth:
 - a. Thickness: 0.0179 inch, unless otherwise indicated.
 - 1) For head runner, sill runner, jamb, and cripple studs at door and other openings.
 - b. Thickness at Ceramic Tile Walls: .0329 inch, minimum.
 - c. Depth: Maximum 3-5/8 inch.
3. Deflection Track: Manufacturer's standard top runner designed to prevent cracking of gypsum board applied to interior partitions resulting from deflection of the structure above fabricated from steel sheet complying with ASTM A 653 or ASTM A 568. Thickness as indicated for studs, and width to accommodate depth of studs, and of the following configuration:
 - a. Top Runner with Compressible Flanges: 2-1/2 inch deep flanges with slots 1 inch o.c.
4. Deflection and Firestop Track: Top runner designed to allow partition heads to expand and contract with movement of structure above while maintaining continuity of the assembly. Comply with requirements of ASTM C 645 except configuration, of thickness indicated for studs and width to accommodate depth of studs indicated with flanges offset at midpoint to accommodate gypsum board thickness.
 - a. Offset Configuration: Shadow-line design with offset projecting out from depth of stud.
5. Steel Rigid Furring Channels: ASTM C 645, hat shaped, depth and minimum thickness of base (uncoated) metal as follows:
 - a. Thickness: 0.0179 inch.
 - b. Depth: 7/8 inch.
6. Furring Brackets: Serrated-arm type, adjustable, fabricated from corrosion-resistant steel sheet complying with ASTM C 645, minimum thickness of base (uncoated) metal of 0.0329 inch, designed for screw attachment to steel studs and steel rigid furring channels used for furring.
7. Steel Flat Strap and Backing Plate: Steel sheet for blocking and bracing complying with ASTM A 653 or ASTM A 568, length and width as indicated, and with a minimum base metal (uncoated) thickness as follows:
 - a. Thickness: 0.0329 inch where indicated.
8. Fasteners for Metal Framing: Provide fasteners of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel framing and furring members securely to substrates involved; complying with the recommendations of gypsum board manufacturers for applications indicated.

E. GYPSUM BOARD PRODUCTS

1. Gypsum Wallboard: ASTM C 36 and as follows:
 - a. Type: Type X.
 - b. Type: Sag-resistant type for ceiling surfaces.
 - c. Edges: Tapered.
 - d. Thickness: 5/8 inch.
2. Gypsum Board Base Layer(s) for Multilayer Applications: Gypsum wallboard, ASTM C 36, and as follows:
 - a. Type: Type X.
 - b. Edges: Manufacturer's standard.
 - c. Thickness: 5/8 inch.
3. Water-Resistant Gypsum Backing Board (for Toilet Rooms): ASTM C 630 and as follows:
 - a. Type: Type X.
 - b. Edges: Manufacturer's standard.
 - c. Thickness: 5/8 inch.

F. TRIM ACCESSOIRES

1. Accessories for Interior Installation: Cornerbead, edge trim, and control joints complying with ASTM C 1047 and requirements indicated below:
 - a. Material: Formed metal, with metal complying with the following requirement:
 - 1) Steel sheet zinc coated by hot-dip process or rolled zinc.
 - b. Shapes indicated below by reference to Fig. 1 designations in ASTM C 1047:
 - 1) Cornerbead on outside corners, unless otherwise indicated.
 - 2) L-bead with face flange only; face flange formed to receive joint compound. Use L-bead where indicated.
 - 3) One-piece control joint formed with V-shaped slot and removable strip covering slot opening.
2. Accessories for Exterior Installations: Cornerbead, edge trim, and control joints formed from steel sheet zinc coated by hot-dip process or rolled zinc complying with ASTM C 1047, in shapes indicated below by reference to Fig. 1 designations in ASTM C 1047.
 - a. Cornerbead on outside corners, unless otherwise indicated.
 - b. Edge trim complying with shape LC-bead per Fig. 1, unless otherwise indicated.
 - c. One-piece control joint formed from rolled zinc with V-shaped slot and removable strip covering slot opening.

G. JOINT TREATMENT MATERIALS

1. General: Provide joint treatment materials complying with ASTM C 475 and the recommendations of both the manufacturers of sheet products and of joint treatment materials for each application indicated.
2. Joint Tape for Gypsum Board: Paper reinforcing tape, unless otherwise indicated.
3. Setting-Type Joint Compounds for Gypsum Board: Factory-packaged, job-mixed, chemical-hardening powder products formulated for uses indicated.
 - a. Where setting-type joint compounds are indicated as a taping compound only or for taping and filling only, use formulation that is compatible with other joint compounds applied over it.
 - b. For filling joints and treating fasteners of water-resistant gypsum backing board behind base for ceramic tile, use formulation recommended by gypsum board manufacturer.
 - c. For topping compound, use sandable formulation.
4. Drying-Type Joint Compounds for Gypsum Board: Factory-packaged vinyl-based products complying with the following requirements for formulation and intended use.
 - a. Ready-Mixed Formulation: Factory-mixed product.
 - 1) Taping compound formulated for embedding tape and for first coat over fasteners and face flanges of trim accessories.
 - 2) Topping compound formulated for fill (second) and finish (third) coats.
 - 3) All-purpose compound formulated for both taping and topping compounds.
 - 4) For tile backer board.

H. ACOUSTICAL SEALANT

1. Acoustical Sealant for Exposed and Concealed Joints: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834 and the following requirements:
 - a. Product is effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.

I. MISCELLANEOUS MATERIALS

1. General: Provide auxiliary materials for gypsum board construction that comply with referenced standards and recommendations of gypsum board manufacturer.
2. Laminating Adhesive: Special adhesive or joint compound recommended for laminating gypsum panels.

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3. Spot Grout: ASTM C 475, setting-type joint compound recommended for spot-grouting hollow metal door frames.
4. Steel drill screws complying with ASTM C 1002 for the following applications:
 - a. Fastening gypsum board to steel members less than 0.033 inch thick.
5. Steel drill screws complying with ASTM C 954 for fastening gypsum board to steel members from 0.033 to 0.112 inch thick.
6. Asphalt-Saturated Organic Felt: ASTM D 226, Type I (No. 15 asphalt felt), nonperforated.
7. Foam Gaskets: Closed-cell vinyl foam adhesive-backed strips that allow fastener penetration without foam displacement, 1/8 inch thick, in width to suit metal stud size indicated.
8. Sound-Attenuation Blankets: Unfaced mineral-fiber blanket insulation produced by combining mineral fibers of type described below with thermosetting resins to comply with ASTM C 665 for Type I (blankets without membrane facing).
 - a. Mineral-Fiber Type: Fibers manufactured from glass, slag wool, or rock wool.

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SECTION 09265

GYPSUM BOARD SHAFT-WALL ASSEMBLIES

A. ACCEPTABLE MANUFACTURERS

1. National Gypsum Company,
2. United States Gypsum Co.,
3. G-P Gypsum Corp.,
4. or as approved.

B. PERFORMANCE REQUIREMENTS

1. Structural Performance Characteristics: As follows:
 - a. Provide gypsum board shaft-wall assemblies capable of withstanding the full air-pressure loads of 5 lbs/sq. ft. for maximum heights of partitions indicated without failing and while maintaining an airtight and smoke-tight seal. Evidence of failure includes deflections exceeding limits indicated, bending stresses causing studs to break or to distort, and end-reaction shear causing runners to bend or to shear and studs to become crippled.
 - b. Provide gypsum board shaft-wall assemblies for horizontal duct enclosures capable of spanning distances indicated within the deflection limits of L1240.

C. QUALITY ASSURANCE

1. Fire-Resistance-Rated Assemblies: Provide gypsum board shaft-wall assemblies as follows:
 - a. Assemblies comply with requirements of fire-response-tested assemblies indicated by GA File Numbers in GA-600, "Fire Resistance Design Manual"; or design designations in UL's "Fire Resistance Directory", FM, or certification listings of Warnock Hersey or another testing and inspecting agency acceptable to authorities having jurisdiction.
 - b. Fire-resistance ratings were determined by testing assemblies for fire response per ASTM E 119.
2. STC-Rated Assemblies: Provide gypsum board shaft-wall assemblies of minimum 40 STC rating, provide assembly materials and construction complying with requirements of assemblies whose STC ratings were determined according to ASTM E 90 and classified according to ASTM E 413 by a qualified independent testing agency.

D. ASSEMBLY MATERIALS

1. General: Provide materials and components complying with requirements of fire-resistance-rated assemblies design. Provide panels in maximum lengths available to eliminate or minimize end-to-end butt joints.
2. Steel Framing: ASTM C 645.
 - a. Protective Coating: Galvanized.
 - b. Studs: Manufacturer's standard profile, depth, and thickness for fire-resistance-rated assembly design.
 - c. Track (Runner): Manufacturer's standard J-profile track with long-leg length as standard with manufacturer, but at least 2 inches in depth matching studs and in thickness indicated in the Gypsum Board Shaft-Wall Assembly Schedule.
 - d. Corner and End Members: Manufacturer's standard profile framing member for use at corners or where assembly terminates at other work, in depth matching studs and in manufacturer's standard thickness not less than the stud thickness as required by the shaft wall assembly.
3. Gypsum Liner Panels: Manufacturer's proprietary liner panels in 1-inch thickness and with moisture-resistant paper faces.
4. Gypsum Wallboard: ASTM C 36, core type as required by fire-resistance-rated assembly design.
 - a. Edges: Tapered.

5. Water-Resistant Gypsum Backing Board: ASTM C 630, core type as required by fire-resistance-rated assembly design.
6. Accessories: Cornerbead, edge trim, and control joints of material and shapes specified in Division 9, Section 09255, "Gypsum Board Assemblies."
7. Gypsum Wallboard Joint-Treatment Materials: Provide materials complying with ASTM C 475 and gypsum board shaft-wall assembly manufacturer's written recommendations for applications design.

E. MISCELLANEOUS MATERIALS

1. General: Provide auxiliary materials for gypsum board shaft-wall construction that comply with requirements indicated and gypsum board shaft-wall assembly manufacturer's written recommendations.
2. Steel drill screws complying with ASTM C 1002 for fastening gypsum board to steel members less than 0.03 inch thick.
3. Steel drill screws complying with ASTM C 954 for fastening gypsum board to steel members from 0.03 to 0.112 inch thick.
4. Runner (Track) Fasteners: Power-driven fasteners of type indicated below and of size and material required to withstand loading conditions imposed on shaft-wall assemblies without exceeding allowable design stress of runners, fasteners, or structural substrates where anchors are embedded.
 - a. Powder-Actuated Fasteners: Provide powder-actuated fasteners with capability to sustain, without failure, a load equal to 10 times that imposed by shaft-wall assemblies, as determined by testing conducted by a qualified independent testing agency according to ASTM E 1190.
5. Acoustical Sealant: As recommended by gypsum board shaft-wall assembly manufacturer for application indicated.
6. Sound-Attenuation Blankets: Unfaced mineral-fiber-blanket insulation produced by combining mineral fibers of type described below with thermosetting resins to comply with ASTM C 665 for Type I (blankets without membrane facing):
 - a. Mineral-Fiber Type: As required to comply with fire-resistance-rated assembly indicated.

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SECTION 09310

CERAMIC TILE

A. ACCEPTABLE MANUFACTURERS

1. Dal-Tile Corporation (Preferred)
2. American Olean Tile Company,
3. Florida Tile Industries, Inc.,
4. or as approved.

B. PERFORMANCE REQUIREMENTS

1. Static Coefficient of Friction (Slip Resistance): For tile installed on walkway surfaces, provide products with the following values as determined by testing identical products per ASTM C 1028:
 - a. Level Surfaces: Minimum 0.6 (wet).
 - b. Ramped Surfaces: Minimum 0.8 (wet).
2. Load-Bearing Performance (Hardness): For ceramic tile installed on walkway surfaces, provide installations rated for the following load-bearing performance level based on testing assemblies according to ASTM C 627 that are representative of those indicated for this Project:
 - a. Heavy: Passes cycles 1 through 12.

C. TILE PRODUCTS

1. Unglazed Ceramic Mosaic Tile: Provide factory-mounted flat tile complying with the following requirements:
 - a. Composition: Porcelain.
 - b. Module Size: 2 by 2 inches.
 - c. Nominal Thickness: 1/4 inch.
 - d. Face: Plain with cushion edges.
2. Unglazed Quarry Tile: Provide square-edged flat tile complying with the following requirements:
 - a. Wearing Surface: Nonabrasive.
 - b. Facial Dimensions: 8 by 8 inches.
 - c. Thickness: 1/2 inch.
 - d. Face: Plain.
3. Glazed Wall Tile: Provide flat tile complying with the following requirements:
 - a. Module Size: 4-1/4 by 4-1/4 inches.
 - b. Thickness: 5/16 inch.
 - c. Face: Plain with cushion edges.
 - d. Mounting: Factory back-mounted (if available).
4. Trim Units: Provide tile trim units by the same manufacturer of adjoining flat tile and to comply with the following requirements:
 - a. Size: As indicated, coordinated with sizes and coursing of adjoining flat tile where applicable.
 - b. Shapes: As follows, selected from manufacturer's standard shapes:
 - 1) Base for Thin-Set Mortar Installations: Straight.
 - 2) External Corners for Thin-Set Mortar Installations: Surface bullnose.
 - 3) Internal Corners: Field-buttet square corners, except with coved base and cap angle pieces designed to member with stretcher shapes.

D. STONE THRESHOLDS

1. General: Provide stone thresholds that are uniform in color and finish, fabricated to sizes and profiles indicated to provide transition between tile surfaces and adjoining finished floor surfaces.
 - a. Fabricate thresholds to heights indicated, but not more than 1/2 inch above adjoining finished floor surfaces, with transition edges beveled on a slope of no greater than 1:2.

2. Marble Thresholds: Provide marble thresholds complying with ASTM C 503 requirements for exterior use and with a minimum abrasive-hardness value of 10 per ASTM C 241.
 - a. Provide white, honed marble complying with the Marble Institute of America's Group A requirements for soundness.

E. WATERPROOFING FOR THIN-SET TILE INSTALLATIONS

1. General: Provide products that comply with ANSI A118.10.
2. Polyethylene-Sheet Waterproofing/Crack Isolation Membrane: Manufacturer's standard proprietary product consisting of composite sheets, 60 inches wide by a nominal thickness of 0.030 inches, composed of an inner layer of nonplasticized, chlorinated polyethylene sheet faced on both sides with laminated, high-strength, nonwoven polyester material, designed for embedding in latex-portland cement mortar and as the substrate for latex-portland cement mortar setting bed.

F. SETTING MATERIALS

1. Latex-Portland Cement Mortar: ANSI A118.4, composed as follows:
 - a. Prepackaged Dry-Mortar Mix: Factory-prepared mixture of portland cement; dry, redispersible, ethylene vinyl acetate additive; and other ingredients to which only water needs to be added at Project site.
 - 1) For wall applications, provide nonsagging, latex-portland cement mortar complying with ANSI A118.4 for mortar of this type defined in Section F-2.1.2.

G. GROUTING MATERIALS

1. Latex-Portland Cement Grout: ANSI A118.6 for materials described in Section H-2.4, composed as follows:
 - a. Factory-Prepared, Dry-Grout Mixture: Factory-prepared mixture of portland cement; dry, redispersible, ethylene vinyl acetate additive; and other ingredients to produce the following:
 - 1) Unsanded grout mixture for joints 1/8 inch and narrower.
 - 2) Sanded grout mixture for joints 1/8 inch and wider.

H. ELASTOMERIC SEALANTS

1. General: Provide manufacturer's standard chemically curing, elastomeric sealants of base polymer and characteristics indicated that comply with applicable requirements of Division 7 Section "Joint Sealants."

I. MISCELLANEOUS MATERIALS

1. Trowelable Underlayments and Patching Compounds: Latex-modified, portland-cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.
2. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.

J. CERAMIC TILE FLOOR INSTALLATION SCHEDULE

1. Ceramic Tile Floor Installation: Where interior floor installations of this designation are indicated, comply with the following:
 - a. Tile Type: Unglazed, ceramic mosaic tile and unglazed quarry tile.
 - b. Installation Method: TCA F122 (thin-set mortar bonded to waterproof/crack isolation membrane over concrete slab).

- c. Setting Bed and Grout: ANSI A108.5 with the following mortar and grout:
 - 1) Latex-portland cement mortar.
 - 2) Sanded latex-portland cement grout.
 - 3) Unsanded latex-portland cement grout.

K. CERAMIC TILE WALL INSTALLATION SCHEDULE

- 1. Ceramic Tile Wall Installations: Where interior wall installations of this designation are indicated, comply with the following:
 - a. Tile Type: Glazed wall tile.
 - b. Installation Method: TCA B413, thin-set mortar bonded to water-resistant gypsum board on metal studs.
 - c. Setting Bed and Grout: ANSI A108.5 with the following mortar and grout:
 - 1) Latex-portland cement mortar.
 - 2) Unsanded latex-portland cement grout.

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SECTION 09511

ACOUSTICAL PANEL CEILINGS

- A. ACCEPTABLE MANUFACTURERS (NO SUBSTITUTIONS)
1. General Applications: Armstrong World Industries.
 2. "Drop Out Tiles": Gilman Brothers.
- B. QUALITY ASSURANCE
1. Source Limitations for Suspension System: Obtain each suspension system from one source with resources to provide products of consistent quality in appearance and physical properties without delaying the Work.
 - a. Fire-response tests were performed by UL, ITS/Warnock Hersey, or another independent testing and inspecting agency that is acceptable to authorities having jurisdiction and that performs testing and follow-up services.
 - b. Surface-burning characteristics of acoustical panels comply with ASTM E 1264 for Class A materials as determined by testing identical products per ASTM E 84.
 2. Seismic Standard: Provide acoustical panel ceilings designed and installed to withstand the effects of earthquake motions according to ASTM E580.
- C. ACOUSTICAL PANELS, GENERAL
1. Acoustical Panel Standard: Provide manufacturer's standard panels of configuration indicated that comply with ASTM E 1264 classifications as designated by types, patterns, acoustical ratings, and light reflectances.
- D. METAL SUSPENSION SYSTEMS, GENERAL
1. Metal Suspension System Standard: Provide manufacturer's standard direct-hung metal suspension systems of types, structural classifications, and finishes indicated that comply with applicable ASTM C 635 requirements.
 2. Finishes and Colors, General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes. Provide manufacturer's standard factory-applied finish for type of system indicated.
 3. Attachment Devices: Size for five times design load indicated in ASTM C 635, Table 1, Direct Hung, unless otherwise indicated.
 - a. Postinstalled Powder-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hangers of type indicated, and with capability to sustain, without failure, a load equal to 10 times that imposed by ceiling construction, as determined by testing per ASTM E 1190, conducted by a qualified testing and inspecting agency.
 4. Wire Hangers, Braces, and Ties: Provide wires complying with the following requirements:
 - a. Zinc-Coated Carbon-Steel Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper.
 - b. Size: Select wire diameter so its stress at three times hanger design load (ASTM C 635, Table 1, Direct Hung) will be less than yield stress of wire, but provide not less than 0.106-inch-diameter wire.
 5. Hanger Rods: Mild steel, zinc coated or protected with rust-inhibitive paint.
 6. Sheet-Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that fit acoustical panel edge details and suspension systems indicated; formed from sheet metal of same material and finish as that used for exposed flanges of suspension system runners.

- a. Baked-Enamel Finish: AA-C12C42R1x (Chemical Finish: cleaned with inhibited chemicals; Chemical Finish: acid-chromate-fluoride-phosphate conversion coating; Organic Coating: as specified below). Comply with paint manufacturer's written instructions for applying and baking and for minimum dry film thickness.
 - 1) Organic Coating: Manufacturer's standard thermosetting coating system with a minimum dry film thickness of 0.8 to 1.2 mils.
 - 2) Color: White unless otherwise noted.
7. Hold-Down Clips for Non-Fire-Resistance-Rated Ceilings: For interior ceilings consisting of acoustical panels weighing less than 1 lb/sq. ft. (4.88 kg/sq. m), provide hold-down clips spaced 24 inches o.c. on all cross tees.

E. ACOUSTICAL PANEL CEILING SCHEDULE

1. All Areas, Unless Directed by the Owner: Water-Felted, Mineral-Base Acoustical Panels for Acoustical Panel Ceiling: Provide acoustical panels and complying with the following:
 - a. Design Products: Second Look IV 2762A manufactured by Armstrong (no substitutions).
 - b. Classification: Panels fitting ASTM E 1264 for Type III, mineral base with painted finish; Form 2, water felted.
 - c. Pattern: Panels fitting ASTM E 1264 pattern designation (description) as specified by product designation.
 - d. Color: White.
 - e. Light Reflectance Coefficient: Not less than LR 0.80.
 - f. Noise Reduction Coefficient: NRC 0.50.
 - g. Ceiling Attenuation Class: Not less than CAC 35.
 - h. Edge Detail: Reveal sized to fit flange of exposed suspension system members.
 - i. Thickness: 3/4 inch.
 - j. Size: 24 by 48 inches.
2. Suspension System for Acoustical Panel Ceiling: Provide acoustical panel ceiling suspension system complying with the following:
 - a. Design Products: Prelude 15/16" Exposed Tee System; Armstrong World Industries, Inc. (no substitutions).
3. Replacement for Existing "Drop Out Ceiling Tiles": Provide drop out ceiling tiles as manufactured by Gilman Brothers, CT. These should not be used in new or renovation projects, only replacement of in kind ceiling system.

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SECTION 09651

RESILIENT TILE FLOORING

- A. ACCEPTABLE MANUFACTURERS (NO SUBSTITUTIONS)
1. Vinyl Composition Tile: Armstrong World Industries.
 2. Wall Base: Armstrong World Industries.
 3. Stair Tread and Accessories: Burke Industries, Inc.
- B. QUALITY ASSURANCE
1. Fire-Test-Response Characteristics: Provide products with the following fire-test-response characteristics as determined by testing identical products per test method indicated below by a testing and inspecting agency acceptable to authorities having jurisdiction.
 - a. Critical Radiant Flux: 0.45 W/sq. cm or greater when tested per ASTM E 648.
 - b. Smoke Density: Maximum specific optical density of 450 or less when tested per ASTM E 662.
- C. RESILIENT TILE
1. Rubber Floor Tile: Products complying with ASTM F 1344 and with requirements specified in the Resilient Tile Flooring Schedule.
 2. Vinyl Composition Floor Tile: Products complying with ASTM F 1066 and with requirements specified in the Resilient Tile Flooring Schedule.
- D. RESILIENT ACCESSORIES
1. Rubber Wall Base: Products complying with FS SS-W-40, Type I and with requirements specified in the Resilient Tile Flooring Schedule.
 2. Rubber Stair Treads: Products of style suitable for use indicated and complying with FS RR-T-650, Composition A and with requirements specified in the Resilient Tile Flooring Schedule.
 3. Risers: Products of same manufacturer as stair treads and complying with requirements specified in the Resilient Tile Flooring Schedule.
 4. Stringers: Products of same manufacturer as stair treads and complying with requirements specified in the Resilient Tile Flooring Schedule.
 5. Rubber Accessory Moldings: Products complying with requirements specified in the Resilient Tile Flooring Schedule.
- E. INSTALLATION ACCESSORIES
1. Trowelable Leveling and Patching Compounds: Latex-modified, portland-cement-based formulation provided or approved by flooring manufacturer for applications indicated.
 2. Stair-Tread-Nose Filler: Two-part epoxy compound recommended by resilient tread manufacturer to fill nosing substrates that do not conform to tread contours.
 3. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.
- F. RESILIENT TILE FLOORING SCHEDULE
1. Rubber Floor Tile: Provide rubber floor tile complying with the following:
 - a. Color and Pattern: As selected by Owner from manufacturer's full range of colors and patterns produced for tile complying with requirements indicated.
 - 1) Style: Constellation by Burke Industries.
 - b. Class: Class I-B (homogeneous rubber tile, through mottled).
 - c. Hardness: Durometer Hardness Shore, Type A per ASTM D 2240 as specified by product designation indicated above.
 - d. Wearing Surface: Smooth.

- e. Thickness: 1/8 inch.
- f. Size: 12 by 12 inches.
- 2. Vinyl Composition Tile: Provide vinyl floor tile complying with the following:
 - a. Color and Pattern: As selected by Owner from manufacturer's full range of colors and patterns produced for tile complying with requirements indicated.
 - 1) Style: Standard Excelon, Imperial texture manufactured by Armstrong, or as approved.
 - b. Class: Class 2 (through-pattern tile).
 - c. Wearing Surface: Smooth.
 - d. Thickness: 1/8 inch.
 - e. Size: 12 by 12 inches.
- 3. Rubber Wall Base: Provide rubber wall base complying with the following:
 - a. Available Products: As follows:
 - 1) Rubber base, Armstrong World Industries, Inc.
 - b. Color and Pattern: As selected by Owner from manufacturer's full range of colors and patterns produced for rubber wall base complying with requirements indicated.
 - c. Style: Cove with top-set toe.
 - d. Minimum Thickness: 1/8 inch.
 - e. Height: 4 inches.
 - f. Lengths: Coils in lengths standard with manufacturer, but not less than 96 feet.
 - g. Outside Corners: Premolded.
 - h. Inside Corners: Premolded.
 - i. Surface: Smooth.
- 4. Rubber Stair Treads and Accessories: Provide rubber stair treads and accessories complying with the following:
 - a. Manufacturer: As follows:
 - 1) Burke Industries, Inc.
 - b. Color and Pattern: As selected by Owner from manufacturer's full range of colors and patterns produced for rubber stair treads and accessories complying with requirements indicated.
 - 1) Style: Square nose visually impaired by Burke Industries.
 - c. Rubber Stair Treads: Type 1 design (smooth) products complying with the following requirements:
 - 1) Abrasive Strips: Provide abrasive strips as specified by product designation indicated above in color selected by Architect from manufacturer's full range of colors.
 - 2) Nosing Style: Square, adjustable to cover angles between 60 and 90 degrees.
 - 3) Nosing Height: As specified by product designation indicated above.
 - 4) Thickness: 3/16 inch tapering to 1/8 inch at back edge.
 - 5) Size: Lengths and depths to fit each stair tread in one piece.
 - d. Rubber Risers: Smooth, flat, coved-toe risers, 1/8 inch thick by 7 inches high by length matching treads.
 - e. Rubber Stringers: Material matching risers, of height and length after cutting to fit risers and treads and to cover stair stringers.
- 5. Rubber Accessory Molding: Provide rubber accessory molding complying with the following:
 - a. Color: As selected by Owner from manufacturer's full range of colors produced for rubber accessory molding complying with requirements indicated.
 - b. Product Description: Carpet edge for glue-down applications. Carpet nosing. Reducer strip for resilient flooring. Tile and carpet joiner. Transition strips, other accessories as required for finished installation.
 - c. Profile and Dimensions: As necessary for floor condition.

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SECTION 09677

STATIC-CONTROL RESILIENT FLOOR COVERINGS

A. ACCEPTABLE MANUFACTURER (NO SUBSTITUTIONS)

1. Armstrong World Industries, Inc.

B. QUALITY ASSURANCE

1. Fire-Test-Response Characteristics: Provide static-control resilient floor coverings with the following fire-test-response characteristics as determined by testing identical products according to test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.
 - a. Critical Radiant Flux: Class I, not less than 0.45 W/sq. cm according to ASTM E 648 or NFPA 253.
 - b. Optical Smoke Density: 450 or less according to ASTM E 662 or NFPA 258.
2. Electrical Resistance: Provide static-dissipative resilient floor coverings with average electrical resistance of 1 to 1000 megohms between an electrode placed on the floor and a ground connection when tested according to ASTM F 150.
3. Static Generation: Provide conductive resilient floor coverings that generate less than 100 volts when tested according to AATCC-134 at 20 percent relative humidity.
4. Static Decay: Provide static-dissipative resilient floor coverings that produce static decay of 5000 to 0 volts in less than 0.25 seconds when tested according to FED-STD-101/4046, at 15 percent relative humidity.

C. STATIC-DISSIPATIVE VINYL COMPOSITION FLOOR TILE

1. Material Composition: Complying with requirements of ASTM F 1066 (vinyl composition tile), Composition 1 (nonasbestos formulated), Class 2 (through pattern tile).
2. Size: 12 by 12 inches.
3. Thickness: 0.125 inch.
4. Color: As selected by Owner from manufacturer's full range of colors and patterns produced for tile of material composition and size specified.
5. Design Product: Excelon SDT; Armstrong World Industries, Inc.

D. ACCESSORIES

1. Trowelable Leveling and Patching Compounds: Latex-modified, portland-cement-based formulation provided or approved by floor covering manufacturer for applications indicated.
2. Static-Control Adhesive: Adhesive product of floor covering manufacturer providing conductive continuity for floor covering system.
3. Grounding Strips: Metal or fabric grounding strips provided or approved by floor covering manufacturer. Attached to building steel framing.
4. Maintenance Tiles: Special tiles inscribed "Conductive floor. Do not wax."
 - a. Locate maintenance tiles at doors or entrances to rooms with Static-Control Resilient Floor Coverings.

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SECTION 09680

CARPET

A. ACCEPTABLE MANUFACTURERS

1. J & J Industries,
2. Mohawk Commercial Carpet,
3. Shaw Industries,
4. Lees Commercial Carpets,
5. or approved equal.

B. Design Product: Faculty IV DK166, manufactured by Lees Commercial Carpets.

C. Precautions for cleaning materials and methods that could be detrimental to finishes and performance. Include cleaning and stain-removal products and procedures.

D. QUALITY ASSURANCE

1. Installer Qualifications: Engage an experienced Installer who is certified by the Floor Covering Installation Board (FCIB) or who can demonstrate compliance with FCIB certification program requirements.
2. Single-Source Responsibility: Obtain each type of carpet from one source and by a single manufacturer.
3. Carpet Fire-Test-Response Characteristics: Provide carpet with the following fire-test-response characteristics as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify carpet with appropriate markings of applicable testing and inspecting agency.
 - a. Surface Flammability: Passes CPSC 16 CFR, Part 1630.
 - b. Flame Spread: 25 or less per ASTM E 84.
 - c. Smoke Developed: 450 or less per ASTM E 84.

E. WARRANTY

1. Special Carpet Warranty: Submit a written warranty executed by carpet manufacturer and Installer agreeing to repair or replace carpet that does not meet requirements or that fails in materials or workmanship within the specified warranty period. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, and delamination.
2. Warranty Period: 10 years from date of Substantial Completion.

F. CARPET

1. Face Construction: Tufted, performance loop pile.
2. Face Fiber: Antron nylon.
3. Gauge: 1/8 inch.
4. Stitches: 8.3 per inch.
5. Pile Height: 0.187 inch.
6. Total Weight: 71.7 ounces per square yard.
7. Primary Backing: Woven polypropylene.
8. Secondary Backing: Woven polypropylene.
9. Width: 12 feet.
10. Performance Characteristics:
 - a. Flammability: Pass methenamine pill test, DOC FF 1-70.

- b. Static: No more than 3 kv as tested by AATCC 134.
 - c. Flame Spread: Critical radiant flux to meet Class II as tested by ASTM E 648.
11. Design Product: Faculty IV DK 166, manufactured by Lees Commercial Carpets.

G. INSTALLATION ACCESSORIES

- 1. Concrete-Slab Primer: Nonstaining type as recommended by the carpet manufacturer.
- 2. Trowelable Underlayments and Patching Compounds: As recommended by the carpet manufacturer.
- 3. Adhesives: Water-resistant, mildew-resistant, nonstaining type to suit products and subfloor conditions indicated and to comply with flammability requirements for installed carpet as recommended by the carpet manufacturer.
- 4. Seaming Cement: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.

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SECTION 09681

CARPET TILE

A. ACCEPTABLE MANUFACTURERS (NO SUBSTITUTIONS)

1. Interface, Inc.

B. QUALITY ASSURANCE

1. Installer Qualifications: Engage an experienced Installer who is certified by the Floor Covering Installation Board (FCIB) or who can demonstrate compliance with FCIB certification program requirements.
2. Single-Source Responsibility: Obtain each type of carpet from one source and by a single manufacturer.
3. Fire-Test-Response Characteristics: Provide carpet tile with the following fire-test-response characteristics as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify carpet tile with appropriate markings of applicable testing and inspecting agency.
 - a. Surface Flammability: Passes CPSC 16 CFR, Part 1630.
 - b. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm per ASTM E 648.
 - c. Flame Spread: 25 or less per ASTM E 84.
 - d. Smoke Developed: 450 or less per ASTM E 84.

C. WARRANTY

1. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
2. Special Carpet Tile Warranty: Submit a written warranty executed by carpet tile manufacturer and Installer agreeing to repair or replace carpet tile that does not meet requirements or that fails in materials or workmanship within the specified warranty period. Failures include, but are not limited to, more than 10 percent loss of face fiber, tile curling, snags, runs, and delamination.
3. Warranty Period: 10 years from date of Substantial Completion.

D. CARPET TILE

1. Face Construction: Tufted textured loop.
2. Face Fiber: DuPont Antron Lumena/DuPont Antron Legacy.
3. Size: 19.69 inch.
4. Primary Backing: Woven polypropylene.
5. Pile Height: .1380 inch.
6. Yarn Weight or Face Weight: 24 oz./sq. yd.
7. Total Weight: 149 oz./sq. yd.
8. Performance Characteristics:
 - a. Flammability: Pass methenamine pill test, DOC FF 1-70.
 - b. Static Resistance: Not less than 500,000 ohms, nor more than 20,000 megohms, measured according to the test method for conductive flooring specified in Chapter 12 of NFPA99.

- c. Static Generation: <3.0kv as tested by AATCC 134.
- d. Flame Spread: Critical radiant flux to meet Class 1 as tested by ASTM E 648.
- 9. Design Product: "Caribbean," Color No. 3050, "Anthias" manufactured by Interface.

E. INSTALLATION ACCESSORIES

- 1. Concrete-Slab Primer: Nonstaining type as recommended by carpet tile manufacturer.
- 2. Trowelable Underlayments and Patching Compounds: As recommended by carpet tile manufacturer.
- 3. Adhesives: Water-resistant, mildew-resistant, nonstaining type to suit products and subfloor conditions indicated and to comply with flammability requirements for installed carpet tile as recommended by carpet tile manufacturer.

F. CLEANING

- 1. Perform the following operations immediately after completing installation:
 - a. Remove visible adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet tile manufacturer.
 - b. Remove protruding yarns from carpet tile surface.
 - c. Vacuum carpet tile using commercial machine with face-beater element.

G. PROTECTION

- 1. General: Comply with CRI 104, Section 15: "Protection of Indoor Installation."
- 2. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure carpet tile is without damage or deterioration at the time of Substantial Completion.

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SECTION 09690

STATIC-DISSIPATIVE CARPET TILE

A. ACCEPTABLE MANUFACTURER (NO SUBSTITUTIONS)

1. United Technical Product, Inc.,

B. QUALITY ASSURANCE

1. Installer Qualifications: Engage an experienced Installer who is certified by the Floor Covering Installation Board (FCIB) or who can demonstrate compliance with FCIB certification program requirements.
2. Single-Source Responsibility: Obtain each type of carpet tile from one source and by a single manufacturer.
3. Fire-Test-Response Characteristics: Provide carpet tile with the following fire-test-response characteristics as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify carpet tile with appropriate markings of applicable testing and inspecting agency.
 - a. Surface Flammability: Passes CPSC 16 CFR, Part 1630.
 - b. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm per ASTM E 648.
 - c. Critical Radiant Flux Classification: Class II, not less than 0.22 W/sq. cm per ASTM E 648.
 - d. Flame Spread: 25 or less per ASTM E 84.
 - e. Smoke Developed: 450 or less per ASTM E 84.

C. WARRANTY

1. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
2. Special Carpet Tile Warranty: Submit a written warranty executed by carpet tile manufacturer and Installer agreeing to repair or replace carpet tile that does not meet requirements or that fails in materials or workmanship within the specified warranty period. Failures include, but are not limited to, more than 10 percent loss of face fiber, tile curling, snags, runs, and delamination.
3. Warranty Period: 5 years from date of Substantial Completion.

D. STATIC-DISSIPATIVE CARPET TILE

1. Face Construction: Plush/cut pile.
2. Face Fiber: Zeftron 500 nylon.
3. Conductive Filaments: 8 per inch.
4. Size: 24 by 24 inches.
5. 1/8 inch.
6. 9 inches.
7. Primary Backing: Woven polypropylene.
8. Pile Height: 0.31 inch.
9. Yarn Weight or Face Weight: 40 oz./sq. yd.
10. Total Weight: 144 oz./sq. yd.
11. Performance Characteristics:

- a. Flammability: Pass methenamine pill test, DOC FF 1-70.
 - b. Static Resistance: Not less than 500,000 ohms, nor more than 20,000 megohms, measured according to the test method for conductive flooring specified in Chapter 12 of NFPA99.
 - c. Static Generation: No more than 2kv as tested by AATCC 134.
 - d. Flame Spread: Critical radiant flux to meet Class 1 as tested by ASTM E 648.
12. Design Product: Compu-Tile Protocol manufactured by United Technical Products, Inc.

E. INSTALLATION ACCESSORIES

- 1. Concrete-Slab Primer: Nonstaining type as recommended by carpet tile manufacturer.
- 2. Trowelable Underlayments and Patching Compounds: As recommended by carpet tile manufacturer.
- 3. Adhesives: Water-resistant, mildew-resistant, nonstaining type to suit products and subfloor conditions indicated and to comply with flammability requirements for installed carpet tile as recommended by carpet tile manufacturer.
- 4. Ground Strips: As recommended by carpet tile manufacturer. Ground final connection into building steel.
- 5. Identification Carpet Tile: Provide tile that identifies the carpet tile as static-dissipative carpet tile. Provide at entry locations to room or as directed by Owner.

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SECTION 09900

PAINTING

A. ACCEPTABLE MANUFACTURERS (NO SUBSTITUTIONS)

1. Glidden.
2. ICI.
3. Sigma Coatings.

B. PAINT MATERIALS, GENERAL

1. Material Compatibility: Provide block fillers, primers, undercoats, and finish-coat materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
2. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
3. Colors: Provide color selections made by the Owner.
4. Surface preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
5. All paint and coatings to be lead free, and certified to be lead free by the manufacturer.
6. Provide tinnings per manufacturer's instructions.
7. Conduct all work in strict compliance with all applicable Federal, Connecticut and local laws, codes, and regulations.

C. EXTERIOR PAINT SCHEDULE

1. Exterior Gypsum Soffit Board: Provide the following finish systems over exterior gypsum soffit board:
 - a. Low-Luster Acrylic Finish: 2 finish coats over a primer.
 - 1) Primer: Exterior, alkyd- or alkali-resistant, acrylic-latex primer, as recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.5 mils.
 - (a) Glidden: Primer not required over this substrate.
 - 2) First and Second Coats: Low-luster (eggshell or satin), exterior, acrylic-latex paint applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.3 mils.
 - (a) Glidden: 6700 Series Spred Ultra Exterior Satin Latex House and Trim Paint.
2. Ferrous Metal: Provide the following finish systems over exterior ferrous metal. Primer is not required on shop-primed items.
 - a. Semigloss, Acrylic-Enamel Finish: 2 finish coats over a rust-inhibitive primer.
 - 1) Primer: Rust-inhibitive metal primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.3 mils.
 - (a) Glidden: 5205 Glid-Guard Tank & Structural Primer, Red.
 - 2) First and Second Coats: Semigloss, exterior, acrylic-latex enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.
 - (a) Glidden: ICI #4308 (color to be selected).

3. Zinc-Coated Metal: Provide the following finish systems over exterior zinc-coated (galvanized) metal surfaces:
 - a. Semigloss, Acrylic-Enamel Finish: 2 finish coats over a galvanized metal primer.
 - 1) Primer: Galvanized metal primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils.
 - (a) Glidden: 5205 Glid-Guard Tank & Structural Primer, Red.
 - 2) First and Second Coats: Semigloss, exterior, acrylic-latex enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.
 - (a) ICI #4308 (white enamel for handrails and black enamel for stairs).

D. INTERIOR PAINT SCHEDULE

1. Concrete (Other than Concrete Masonry Units): Provide the following paint systems over interior concrete and brick masonry surfaces:
 - a. Semigloss, Acrylic-Enamel Finish: 2 finish coats over a primer.
 - 1) Primer: Alkali-resistant, acrylic-latex, interior primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.0 mil.
 - (a) Primer as required by ICI.
 - 2) First and Second Coats: Semigloss, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.
 - (a) ICI: #1416-0110 Autumn Mist.
2. Concrete Masonry Units: Provide the following finish systems over interior concrete masonry block units:
 - a. Semigloss, Acrylic-Enamel Finish: 2 finish coats over a block filler.
 - 1) Block Filler: High-performance, latex-based, block filler applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 5.0 mils.
 - (a) Glidden: 5317 Ultra-Hide Block Filler, Latex Interior-Exterior.
 - 2) First and Second Coats: Semigloss, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.
 - (a) ICI #1416-0110 Autumn Mist.
3. Gypsum Board: Provide the following finish systems over interior gypsum board surfaces:
 - a. Semigloss, Acrylic-Enamel Finish: 2 finish coats over a primer.
 - 1) Primer: Latex-based, interior primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils.
 - (a) As recommended by ICI.
 - 2) First and Second Coats: Semigloss, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.
 - (a) ICI: #1416-0110 Autumn Mist (for walls) and #1416-1000 White (for ceilings).
4. Plaster: Provide the following finish systems over new, interior plaster surfaces:
 - a. Semigloss, Acrylic-Enamel Finish: One finish coat over an undercoat and a primer.
 - 1) Primer: Alkali-resistant, alkyd- or latex-based, interior primer, as recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils.
 - (a) As recommended by ICI.
 - 2) First and Second Coats: Semigloss, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.
 - (a) ICI: #1416-0110 Autumn Mist (for walls), #1416-1000 White (for ceilings).
5. Woodwork: Provide the following paint finish systems over new, interior wood surfaces:
 - a. Semigloss, Acrylic-Enamel Finish: 2 finish coats over a wood undercoater.

- 1) Undercoat: Alkyd- or acrylic-latex-based, interior wood undercoater, as recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils.
 - (a) As recommended by ICI.
- 2) First and Second Coats: Semigloss, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.
 - (a) ICI: #1416-0110 Autumn Mist (for walls).
6. Ferrous Metal: Provide the following finish systems over ferrous metal:
 - a. Semigloss, Acrylic-Enamel Finish: One finish coat over an enamel undercoater and a primer.
 - 1) Primer: Quick-drying, rust-inhibitive, alkyd-based or epoxy-metal primer, as recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.5 mils.
 - (a) As recommended by ICI.
 - 2) Undercoat: Alkyd, interior enamel undercoat or semigloss, acrylic-latex, interior enamel, as recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.3 mils.
 - (a) As recommended by ICI.
 - 3) Finish Coat: Semigloss, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.3 mils.
 - (a) ICI: #4308 (color to be selected).
7. Zinc-Coated Metal: Provide the following finish systems over zinc-coated metal:
 - a. Semigloss, Acrylic-Enamel Finish: 2 finish coats over a primer.
 - 1) Primer: Galvanized metal primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils.
 - (a) As recommended by ICI.
 - 2) First and Second Coats: Semigloss, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.
 - (a) ICI: #4308 (color to be selected).
8. Cotton or Canvas Covering over Insulation: Provide the following finish system on cotton or canvas insulation covering:
 - a. Flat Acrylic Finish: 2 finish coats. Add fungicidal agent to render fabric mildewproof.
 - 1) First and Second Coats: Flat, latex-based, interior paint applied at spreading rate recommended by the manufacturer.
 - (a) ICI: #1416 (color to be selected).
9. Sprayed-On Fireproofing
 - a. Flat Latex Fire Retardant Finish: Two finish coats.
 - 1) First and Second Coats: Flat, latex-based fire retardant paint as recommended and approved by the Sprayed-On Fireproofing Manufacturer.

E. Special Equipment Schedule

1. Cranes: Provide the following finish system:
 - a. Coating: Finish top coat over primer.
 - 1) Primer: Sigmacover 7428ST Buff (8 mils min.).
 - 2) Top Coat: Sigmadur 5523 (2 mils min.).
 - 3) Color to be selected by Owner.
 - 4) Identification System: Stencil the following information on the crane as directed by Owner. Use black urethane coating in 4 inch high lettering stating month and year of completion, identification of cleaning method, identification of paint system and identification of Contractor.

2. Graving Dock: Provide the following finish system.
 - a. Coating: Top coat over no primer.
 - 1) Top Coat: Interzone 954 (20 mils min.).
 - 2) Color to match existing coating.

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