

509 CHESTNUT STREET RENOVATION**OUTLINE SPECIFICATIONS**

Atlantic, Iowa

Note: In the interest of brevity, often only one manufacturer and/or product may be listed in these Outline Specification Sections. These are intended to be "product standards" and are used here to establish a level of quality that future design phases will elaborate upon. A more comprehensive listing of manufacturers and products will be specified in each Specification Section in subsequent phases of this Project

DIV 00 PROCUREMENT AND CONTRACTING REQUIREMENTS**(00 5000) CONTRACTING FORMS AND SUPPLEMENTS**

- * Use the following forms for the specified purposes unless otherwise indicated elsewhere in the Contract Documents.
- * Bond Forms:
 - Performance and Payment Bond Form: AIA A312
- * Post-Award Certificates and Other Forms:
 - Certificate of Insurance Form: ACORD Form 25
 - Schedule of Values Form: AIA G703
- * Clarification and Modification Forms:
 - Request for Interpretation Form: Contractor's Form
 - Architect's Supplemental Instruction Form: Architect's Form
 - Construction Change Directive Form: Architect's Form
 - Proposal Request Form: Architect's Form
- * Closeout Forms:
 - Certificate of Substantial Completion Form: AIA G704
 - Affidavit of Payment of Debts and Claims Form: AIA G706
 - Affidavit of Release of Liens Form: AIA G706A
 - Consent of Surety to Final Payment Form: AIA G707
- * Reference Standards
 - AIA A201 – General Conditions of the Contract for Construction; 2007.
 - AIA A312 – Performance Bond and Payment Bond; 2010.
 - AIA G703 – Continuation Sheet; 1992.
 - AIA G704 – Certificate of Substantial Completion; 2000.

(00 7200) GENERAL CONDITIONS

- * The General Conditions of the Contract are that which is referenced in the Owner-Contractor Agreement and hereinafter is referred to as the "General Conditions" and shall apply to each and every Section of the Work as though written in full therein and are made a part of the Contract Documents by reference.
- * AIA Document A201, 2007 edition.

(00 7313) SUPPLEMENTARY CONDITIONS

- * Sections of Division 01 - General Requirements govern the execution of all Sections of the Specifications.
- * The relationship between Specifications and Drawings shall be equal authority and priority. Should they disagree in themselves, or with each other, bids shall be based on the most expensive combination of quality and quantity of Work indicated. The appropriate Work, in the event of the above-mentioned disagreements, shall be determined by the Architect.
- * Should the Drawings disagree in themselves, figures shall govern over scaled measurements, large-scaled Drawings shall govern over small-scaled Drawings, the greater quantity of work or materials shall be furnished and performed; the descriptive writings shall govern over legends indicating material or conditions, and the Agreement takes precedence over all other Contract Documents.
- * Failure to report a conflict in the Contract Documents shall be deemed evidence that the Contractor has elected to proceed in the more expensive

DIV 01 GENERAL REQUIREMENTS

(01 1000) SUMMARY

- * Project Name: 509 Chestnut Street Renovation
- * Owner's Name: Matthew Weresh
- * Architect: Spiller, LLC
- * Description of Work: The project consists of a renovation of the second story of an existing multi-use building. The project floor area is approximately 1,900 square foot. The existing building's second floor will consist of 2 apartment units, a 1 bedroom, and a two bedroom. The first floor is currently unoccupied space for business use.
- * Contractor Use of Site and Premises: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.
- * Renovation Work at/near Existing Building(s): Ensure that exits provide free and unobstructed egress. Personnel shall receive training, and the staff shall be notified if alternative exits must be designated. Buildings/areas under construction must maintain escape facilities for construction workers at all times. Means of egress in construction areas must be inspected daily.
- * Work Sequence: Coordinate work of the various Sections of Specifications to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed later. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduits, as closely as practicable; make runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- * Definitions and Explanations:
 - Except as otherwise indicated, requirements expressed are to be performed by the Contractor as if preceded by the phrase "The Contractor shall".
 - The term "provide" means furnish and install, complete, and ready for intended use. Except as otherwise defined in greater detail, the term "furnish" means supply and deliver to the project site, including unloading, unpacking, inspecting, and storing until ready for receipt by Owner, installation, etc., as applicable.
 - Except as otherwise defined in greater detail, the term "install" is used to describe operations at project site including assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations, as applicable.
 - The term "indicated" is as cross-reference to graphics, notes or schedules on drawings, to other paragraphs or schedules in the specifications, and to similar means of recording requirements in contract documents. Where terms such as "shows", "noted", "schedules", and "specified" are used in lieu of "indicated", it is for purpose of helping reader locate cross-reference, and no limitations of location is intended.

(01 2000) PRICE AND PAYMENT PROCEDURES

- * Schedule of Values: Use the Project Manual Table of Contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section. In addition to the Schedule of Values, submit an itemized Cost Data Report.
- * Payment Application Forms: Use AIA Document G702 and AIA Document G703 Continuation Sheets as form for Applications for Payment.
- * Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time.
- * Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Architect.
- * Construction Change Directive: Instruct Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
- * Minor Changes in Work: Architect will issue supplemental instructions.

(01 3000) ADMINISTRATIVE REQUIREMENTS

- * Contractor to coordinate construction operations included in various Sections of the Specifications to ensure efficient and orderly installation of each part of the Work.
- * Preconstruction Meeting: Attendance Required: Owner, Architect, and Contractor.
- * Preinstallation Conferences: Contractor to conduct a Preinstallation Conference at Project Site before each construction activity that requires coordination with other construction.
- * Progress Meetings: Contractor to conduct Progress Meetings at regular intervals. Coordinate dates of meetings with preparation of payment
- * Coordination Meetings: Contractor to conduct Coordination Meetings on an as-needed basis. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
- * Letters, Memoranda, and Fax Communications: Submit in formats acceptable to the Architect.
- * E-Mail Communications/Internet Communications/Project Management Software Communications: Submit in forms and formats acceptable to and as approved by the Architect.
- * RFI (Request for Information - Contractor): Submit on "Request for Information" form furnished by the Architect, or on other forms as approved by the Architect.
- * RFI-A (Request for Information - Architect): Will be submitted by Architect to Contractor on Architects standard form.
- * Construction Schedule: Gantt-Chart or Critical Path Method Schedule with monthly updates.
- * Specification Format: Divisions and Sections based on the 50 Division format and CSI "MasterFormat" (2010 edition) numbering system.
- * Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

(01 3300) CONSTRUCTION SUBMITTALS

- * Shop Drawings: Of each fabricated assembly.
- * Product Data: Of each manufactured product.
- * Samples: Of each finish material.

(01 4000) QUALITY REQUIREMENTS

- * Quality Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with requirements and meet industry standards and manufacturer's recommendations.
- * Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.

(01 5000) TEMPORARY FACILITIES AND CONTROLS

- * Construction Facilities: Field Offices, Storage Sheds, Sanitary Facilities.
- * Temporary Controls: Pest, Erosion, and Sediment Control.
- * Temporary Construction: Access Roads and Parking.
- * Construction Aids: Hoist, Cranes, Elevators, and Staging.
- * Temporary Utilities: Water, Electricity, Telephone, Sewer, Heating, Fire Protection.
- * Temporary Barriers and Enclosures: Fences, Walkways, Barricades, Security.
- * Cutting: Removal of existing construction necessary to permit installation or performance of other Work.
- * Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

(01 6000) PRODUCT REQUIREMENTS

- * Provide products that comply with the Contract Documents, that are undamaged, and unless otherwise indicated, that are new at time of installation.
- * Substitutions: Requests for changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by Contractor before bid. Use the Substitution Request Form (01 6000.01) provided by the architect. Request the form via pdf by emailing the architect.
- * Burden of proof of equality rests solely with Contractor.
- * Owner-Furnished, Owner-Installed (OFOI) Products: Not in contract; Roughing-in for OFOI Product is provided by applicable Sections governing the type of work. Obtain rough-in requirements from Owner.
- * Owner-Furnished, Contractor-Installed (OFCI) Products: Provide labor, transportation, materials, tools, appliances and utilities necessary to relocate and install owner furnished products.

(01 7300) EXECUTION REQUIREMENTS

- * Field Engineering: By Registered Surveyor or Professional Engineer

(01 7419) CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

- * Develop waste management plan that results in end-of-Project rates for salvage/recycling of 50 percent by weight of total waste generated by the Work.

(01 7700) CLOSEOUT PROCEDURES

- * Closeout Procedures: Final inspection by Owner and Architect.
- * Project Record Documents: Marked-up drawings and specifications during construction.
- * Warranties: Standard and special product warranties from date of substantial completion.
- * Operation and Maintenance Data: Bound manual for Owner's use.
- * Final Cleaning: By experienced workers or professional cleaners.

(01 8111) SUSTAINABLE CONSTRUCTION REQUIREMENTS

- * Indoor Air Quality Management - During Construction: Comply with SMACNA's "IAQ Guideline for Occupied Buildings under Construction."
- * Low Emitting Materials - Interior Adhesives and Sealants: For field applications that are inside the weatherproofing system, use adhesives and sealants that comply with the limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- * Low Emitting Materials - Interior Paints and Coatings: For field applications that are inside the weatherproofing system, use paints and coatings that comply with the limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24) and related chemical restrictions.
- * Low Emitting Materials - Carpets: All carpets installed in the building interior shall meet the testing and product requirements of the Carpet and Rug Institute's (CRI) Green Label Plus program

DIV 2 EXISTING CONDITIONS**(02 4100) SELECTIVE DEMOLITION**

- * Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- * Remove and Salvage: Detach items from existing construction and deliver them to Owner's designated storage area.
- * Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- * Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

DIV 3 CONCRETE**(03 1000) CONCRETE FORMING AND ACCESSORIES**

- * Engineering: By Structural Engineer employed by the Contractor.
- * Tolerance: ACI 301.
- * Shoring: ACI 347.
- * Removal: Not before concrete has reached 75 per cent of design 28-day compressive strength or before 96 hours after completion of concrete finishing operations.
- * Compressive strength to be verified by testing field-cured cylinders.
- * Expansion Joint Filler: Sonneborn "Sonoflex F."
- * Waterstop: "Synko-Flex" Preformed Plastic Adhesive Waterstop.
- * Vapor Retarder: Refer to Division 07 Section "Under-Slab Vapor Barriers."

(03 2000) CONCRETE REINFORCING

- * Reinforcing Steel: ASTM A615, Grade 60, domestic deformed billet steel.
- * Welded Wire Fabric: ASTM A185, 65,000 psi yield strength.
- * Fiber Reinforcing: Cold-drawn steel fibers per ASTM A820 and/or macro synthetic fibers per ASTM Subcommittee C09.42.
- * Installation Tolerances: ACI 301.

(03 3000) CAST-IN-PLACE CONCRETE

- * Standards: ACI 301.
- * Tolerances: ACI 117.
- * Mix Designs: ACI 211 and ACI 318.
- * Concrete: ASTM C94, ready-mixed.

DIV 5 METALS**(05 1200) STRUCTURAL STEEL FRAMING**

- * Standards: AISC, AWS.
- * Wide Flange Shapes and Tees: ASTM A992, (50 KSI yield).
- * High Strength Bolts: ASTM A325N or A490N.
- * Rolled Shapes, Plates, and Rods: ASTM A36, (36 KSI yield).
- * Hollow Structural Sections (HSS):
 - Square and Rectangular: ASTM A500, Grade B (46-ksi yield).
 - Round: ASTM A500, Grade B (42-ksi yield).
- * Anchor Rods: ASTM F1554.

(05 4000) METAL COLD FORMED METAL FRAMING

- * Engineering: By steel stud framing fabricator.
- * Standard Exterior Wall Deflection: L/360.
- * Steel Studs: ASTM C 955, C-Shaped, G90 galvanized; 6 inch minimum depth.
- * Steel Plate: ASTM A36, G90 galvanized; thickness necessary to support concrete floor topping meeting deflection requirements.
- * Installation: ASTM C1007, 16 inch on center maximum spacing.

(05 5100) METAL STAIRS

- * Standards: NAAMM, Commercial Class, AWS, ADA., ANSI/NAAMM MBG 531 and 532.
- * Engineering: By metal stair fabricator & licensed engineer.
- * Treads and Landings: Steel grating, galvanized, Rectangular bar, serrated surface Steel Gratings: ASTM A36, G90 galvanized.
- * Stringers: ASTM A36, G90 steel channels, galvanized
- * Handrails and Guardrails: Refer to Division 05 Section "Pipe and Tube Railings."

(05 5213) PIPE AND TUBE RAILINGS

- * Handrails: ASTM A500, Grade A, 13 gage, 1-1/2 inch outside diameter steel tubing
- * Guardrails: ASTM A53, Type S, Grade A, Schedule 40, 1-1/2 inch outside diameter steel pipe

DIV 6 WOOD, PLASTICS, AND COMPOSITES**(06 1000) ROUGH CARPENTRY**

- * Preservative Wood Treatment: AWPA Standard U1, Use Category UC3B; for all blocking, and nailers in conjunction with roofing and embedded within exterior wall construction.

- * Fire Retardant Treatment: AWPA Standard U1, Use Category UCFB.
- * Grade for Dimension Lumber: No. 2 Hem-Fir or Southern Pine; DOC PS 20; kiln-dried.
- * Plywood Sheathing: DOC PS 1, Exposure 1; Grade B-C in mechanical and electric rooms.

(06 1629) ACOUSTICAL UNDERLAYMENTS

- * Floor Assembly Sound Reduction Requirements: Sound reduction underlayments shall contribute to achieving following ratings in floor assemblies when tested by qualified independent testing agency acceptable to authorities having jurisdiction:
- * Sound Transmission Class (STC): Not less than 58 according to ASTM E90.
- * Impact Insulation (or Isolation) Class (IIC): Not less than 60 according to ASTM E492.
- * Basis of Design: Maxxon Corporation; "Acousti-Mat II" sound control mat.
- * Thickness: 1/4 inch.
- * Roll Width: 48 inches.

(06 4100) ARCHITECTURAL WOOD CASEWORK

- * Standards: AWS Premium Grade.
- * Standing and Running Trim: AWS Section 300.
- * Paneling: Refer to Division 06 Section "Wood-Veneer Paneling."
- * Handrails: AWS Section 800.
- * Door Frames: AWS Section 900.
- * Factory Finishing: AWS Section 1500, Transparent Finish TR-4.
- * Installation: AWS Section 1700.
- * Cabinet face frame: 3/4" thick solid wood. Stiles and rails are 1 1/2" wide. Each joint is glued and screwed.
- * High Pressure Decorative Laminate: NEMA LD3, Cabinet faces and doors VGS; shelves HGL; interior CLS; Tops HGS.
- * Cabinet Construction: Plywood side or Plywood construction, I-beam reinforced
- * Cabinet Interior: Maple print laminate.
- * Countertops: As specified in Division 12 Section "Countertops."
- * Drawer Construction: 3/4" thick, solid hardwood and dovetailed at each corner. 1/4" thick captive bottom dadoed into drawer box sides, front and back and recessed 3/8". Top edges eased and entire drawer coated with high performance acrylic coating. Lifetime guarantee.
- * Hardware: Concealed hinges, drawer slides, shelf supports, locks, pulls

DIV 7 THERMAL AND MOISTURE PROTECTION**(07 2100) THERMAL INSULATION**

- * Extruded Polystyrene Board Insulation: ASTM C578 of following type and minimum compressive strength
- * - Slabs-on-grade: Type VI, 40psi
- * Spray-Applied Thermal insulation: ASTM C1149, Type I; self-supported, spray applied cellulosic insulation
- * - Underside of existing roof, required R-49
- * Unfaced Fiberglass Batt Insulation: ASTM C665, Type 1
- * Unfaced Fiberglass Semi-Rigid Insulation: ASTM C612, Type IA or Types IA and IB

(07 2700) AIR BARRIER MEMBRANES

- * Synthetic Sheet Air and Water Barrier: Non-perforated, non-woven, polyethylene or polypropylene sheet, bonded under heat and pressure, without binders or fillers.
- * Available Manufacturers and Products:
 - * · DuPont Co.; Tyvek Commercial Wrap.
 - * · Fiberweb; Typar MetroWrap.
 - * · VaproShield; WrapShield.
- * Barrier Seaming Tape: Pressure sensitive, adhesive coated tape for sheet to sheet lap joints; temperature and ultraviolet light degradation resistant; provided by barrier manufacturer.
- * Barrier Sealing Tape: Barrier material laminated to adhesive coated rubberized asphalt or butyl for sheet to surrounding construction sealing; provided by barrier manufacturer.
- * Location: Over exterior gypsum sheathing.
- * Location: Over exterior plywood sheathing.

(07 4646) FIBER CEMENT SIDING

- * Fiber Cement Siding Panel
- * Basis of Design: James Hardie Vertical Siding Panel
- * Color: To be selected from manufacturer's standards

(07 5400) THERMOPLASTIC MEMBRANE ROOFING

- * Standards: NRCA, FMG 1A-90, SPRI-RP-4.
- * Warranty: 15 years, "No Dollar Limit."
- * Allowable Single-Ply Membranes:
 - * PVC:
 - * · ASTM D4434, Type II or III, 60 mil reinforced.
 - * · Acceptable PVC Manufacturers: Carlisle, GAF, Johns Manville, Sarnafil.
 - * TPO:
 - * · ASTM D4434, 60-mil reinforced.
 - * · Acceptable TPO Manufacturers: Johns Manville, Sarnafil, Seaman Corp., Carlisle, Firestone, GAF, Johns Manville, Stevens.
 - * EPDM:
 - * · ASTM D4637, Type I, 60-mil unreinforced
 - * · Acceptable EPDM Manufacturers: Carlisle, Firestone, Johns Manville
- * Insulation: ASTM C1289, Type II, Polyisocyanurate tapered, minimum R-30.
- * Cover Board: 1/4 inch Georgia-Pacific Gypsum LLC; DensDeck Prime or DuraGuard
- * Application: Fully adhered.

(07 6200) SHEET METAL FLASHING AND TRIM

- * Premanufactured or Shop-Fabricated: Provide premanufactured or shop-fabricated copings, roof-edge flashing (gravel stops), and reglets and counterflashings.
- * Self-Adhering, High-Temperature Rubberized Asphalt Underlayment Sheet: Minimum 30 mils to 40 mils thick, consisting of slip-resisting polyethylene-film top surface laminated to layer of butyl or SBS-modified asphalt adhesive, with release-paper backing; cold applied.
- * Shop-Fabricated Flashing Standards: SMACNA, FM Data Sheet 1-49.
- * Metallic-Coated Sheet Steel: Zinc-coated (galvanized) steel sheet or aluminum-zinc alloy-coated steel sheet, standard of manufacturer; 24 gage, 0.025 inch nominal minimum thickness
- * Aluminum Sheet: ASTM B209/B209M; 24 gage, 0.025 inch nominal minimum thickness; use for premanufactured installations visible to public view.
- * Galvanized Steel Sheet: ASTM A653, G90 galvanized; 24 gage, 0.025 inch nominal minimum thickness; use as exposed flashing at roof.
- * Stainless Steel Sheet: ASTM A240, Type 304 soft annealed No. 2D finish; 24 gage, 0.025 inch nominal minimum thickness; use for concealed flashing.

(07 7200) ROOF ACCESSORIES

- * Roof Curbs and Equipment Supports: Prefabricated, 0.0747 inch galvanized metal, 12 inch high with top wood nailer.
- * Roof Hatches: Metal roof-hatch units with lids and insulated double-walled curbs, welded or mechanically fastened and sealed corner joints, continuous lid-to-curb counterflashing and weathertight perimeter gasketing, and integrally formed deck-mounting flange at perimeter bottom; sizes as indicated.
- * Heat and Smoke Vents: Manufacturer's standard, with double-walled insulated curbs, welded or mechanically fastened and sealed corner joints, integral condensation gutter, and cap flashing. Fabricate with insulated double-walled lid and continuous weathertight perimeter lid gaskets, and equip with automatic self-lifting mechanisms and UL-listed fusible links rated at 165 deg F and coordinated with fire-suppression and smoke-detection systems.
- * Precast Concrete Splash Blocks: Prefabricated units of reinforced Portland cement concrete, aggregates, admixtures, and water; shaped to divert water away from building. Minimum size: 12 by 24 by 3 inches high. Weight: 50 lbs. Provide protection layer below splash block to protect roofing system.
- * Snow Guards: Prefabricated, noncorrosive units designed to be installed without penetrating roofing system; complete with predrilled holes, clamps, or hooks for anchoring. Snow guards materials and mounting method shall be fully compatible with adjacent roofing system to avoid any damage or penetrations which may compromise the integrity of the system.
- * Snow and Ice Melt Systems: Bylin Engineered Systems; Roof Ice Melt "RIM" (or "RIM2") Eave, Rake, and Valley Panels.

(07 8400) FIRESTOPPING

- * Performance Requirements: Provide firestopping systems that are produced and installed to resist spread of fire according to requirements indicated, resist passage of smoke and other gases, and maintain original fire-resistance rating of assembly penetrate
- * Through-Penetration Systems: UL "Fire Resistance Directory" Section XHEZ and Section XHHW.
- * Top-of-Wall: Safing material (ASTM C612, Type 1A and 1B), coating material, and fire-resistive sealants.

(07 9200) JOINT SEALANTS

- * Exterior Pourable Urethane Sealant: ASTM C920, Type M, Grade P, Class 25, Use T.
- * Exterior Non-sag Silicone Sealant: ASTM C920, Type S, Grade NS, Class 50 or 100/50 as applicable for substrate.
- * Interior Non-sag Silicone Sealant: ASTM C920, Type S, Grade NS, Class 25
- * Interior Non-sag Urethane Sealant: ASTM C920, Type S, Grade NS, Class 25 or 35.
- * Interior Non-sag Acrylic Latex Sealant: ASTM C834, Type and Grade as required by conditions.

DIV 8 OPENINGS**(08 1113) HOLLOW METAL DOORS AND FRAMES**

- * Standards: HMMA 861, NFPA 80.
- * Exterior:
- * Doors: 16 gage galvanized steel sheets, ASTM A652, G60 zinc coating, flush seamless construction.

- * Frames: 14 gage galvanized steel sheets, ASTM A653, G60 zinc coating, full welded construction.
- * Interior:
- * Doors: 18 gage cold rolled steel sheets, ASTM A366, flush seamless construction
- * Frames: 16 gage hot or cold rolled steel sheets, ASTM A366 or ASTM A569, full welded construction
- * Basis of Design:
- * Dunbarton Corporation, flat panel, HM fire rated frame, w/ concealed closer

(08 1416) **FLUSH AND STILE AND RAIL WOOD DOORS**

- * Standards: AWS 1300 and 1400, Premium Grade.
- * Warranty: Life of installation.
- * Wood Veneer Clad Doors: PC-5-ME.
- * Factory Finishing: AWS 1500, TR-6 catalyzed polyurethane.
- * Factory Fitting: Factory fit and machine for hardware.



Molded Wood Composite
Conmore Smooth All Panel

* **Basis of Design:**

- * Interior Door: Jeldwen, Molded Wood Composite Interior Door: Conmore Smooth All Panel, ProCore Solid Core, Primed (Provide Architect w/ prefinish samples)

(08 3100) **ACCESS DOORS AND PANELS**

- * Locations
 - At concealed valves and controls for plumbing and HVAC.
 - Fire rated access doors at rated walls and ceilings.
 - At fire dampers above non-accessible ceilings.
 - Motor operated doors and grilles above non-accessible ceilings
 - Zinc coated steel access doors at exterior locations.
 - Stainless steel access doors at ceramic tile and other damp locations.

(08 7100) **DOOR HARDWARE**

- * Provide self closing hinges at unit entrances.
- * Provide emergency key cabinet (Knox Box) at building entrances; coordinate mounting type and locations with Fire Department.
- * Door hardware allowance: Allow \$450 (US) per door leaf for purchase and delivery of door hardware
- * Interior Unit Door Hardware: Allow \$250 (US) per door leaf for purchase and delivery of door hardware

(08 8300) **MIRRORS**

- * Annealed Float Glass: ASTM C1036, Type I, Quality q3, Class 1, 1/4 inch thick
- * Tempered Float Glass: ASTM C1048, Type I (transparent glass, flat), Condition A (uncoated), Kind FT (fully tempered), Quality q3 (glazing select) Class I (clear) float glass, thickness 1/4 in
- * Coating: Chemically deposited silver, copper and protective organic coating.
- * Edge Treatment: Unframed, seamed (swiped) with edge sealer.
- * Mounting: Stainless steel continuous top and bottom "J" molding.
- * Annealed Float Glass Mirrors: Public restrooms; Refer to Division 10 Section "Toilet Accessories" for framed mirrors at single person toilet rooms.
- * Tempered Float Glass Mirrors: Where safety glazing is indicated or required, such as floor to ceiling glass in an elevator cab or other room.

DIV 9 FINISHES

(09 2116) **GYPSUM BOARD ASSEMBLIES**

- * Gypsum Board: ASTM C36, Type X, 1/2 inch thick.
- * Tile Backer Board at Wet Walls, including Showers: Moisture-resistant paperless glass-mat gypsum board, 1/2 inch thick.
- * Inside Board at Exterior Walls: Moisture-resistant paper-faced or moisture-resistant paperless glass-mat gypsum board, 5/8 inch thick.
- * Trim and Accessories: ASTM C1047, corner beads, L-beads, V-slot control joints.
- * Finishing: Comply with GA-214.
- * FINISHING LEVEL 1: Areas above ceilings
- * FINISHING LEVEL 2: Moisture resistant gypsum board used as substrate for ceramic tile.

- * FINISHING LEVEL 3: Mechanical, and electrical equipment rooms.
- * FINISHING LEVEL 4: Areas to receive paint.
- * FINISHING LEVEL 5: Curved ceilings and partitions.

(09 3000) TILING

- * Locations for Tile 1: Kitchen backsplash
- * Floor Tile Finish: ASTM C1028, static coefficient of friction not less than 0.60.
- * Installation: ANSI A108, TCNA standards.
- * Thin Set Floors: ANSI A118.10; TCNA F125A, crack isolation membrane underlayment.
- * Thin Set Shower Pan Installations: ANSI A118.10, non-plasticized, chlorinated polyethylene faced on both sides with high-strength, non-woven polyester fabric, for adhering to latex-Portland cement mortar; 0.030 inch nominal thickness, "Noble Company, NobleSeal TS."
- * Thin Set Shower Wall Installations: ANSI A118.10, non-plasticized, chlorinated polyethylene faced on both sides with high-strength, nonwoven polyester fabric, for adhering to latex-Portland cement mortar; 0.030 inch nominal thickness, "Noble Company, NobleSeal TS."
- * Grout: ANSI A118.6, Latex Portland Cement grout - Epoxy performance
- * Provide Tile allowance of \$8/sf

(09 6400) WOOD FLOORING

- * Supplier/Type: Hardwood: Match species and width of historic wood floor
- * Dimension:
- * Installation: Wood sub-floor, glue and nail

(09 6500) RESILIENT FLOORING

- * Resilient Tile Flooring:
- * Luxury Vinyl Tile: ASTM F1700, Class 3, luxury vinyl tile, unless otherwise indicated
- * Basis of Design:

(09 9000) PAINTING AND COATING

- * Locations: Exposed surfaces except prefinished architectural metal.
- * Type: Latex, low VOC and EPA compliant, best quality "Trade Sales" paint.
- * Metal: Primer and two coats semi-gloss acrylic enamel.
- * Gypsum Board: Primer/texture and two coats acrylic enamel.
- * Basis of Design
 - Paint 1: Sherwin Williams, Pure White, Egg Shell (walls & Ceiling)
 - Paint 2: Sherwin Williams, Pure White, Satin finish (trim)

DIV 10 SPECIALTIES**(10 2813) TOILET ACCESSORIES**

- * Provide accessory allowance: \$500/unit
- * Basis of Design:
- * Towel Bar:
- * Towel Ring:
- * TP Holder:
- * Shower Rod:
- * Vanity Mirror:

(10 4400) FIRE PROTECTION SPECIALTIES

- * Fire Extinguishers - Typical: Multipurpose dry chemical type, UL-rated 2-A;10-B:C 5lb. Capacity
- * Mounting Bracket

(10 5500) POSTAL SPECIALTIES

- * Aluminum: ASTM B209, clear anodized finish
- * Mailboxes: Surface mount Vertical type, extruded aluminum compartment doors, five pin tumbler cylinder locks.

DIV 11 EQUIPMENT**(11 3100) RESIDENTIAL APPLIANCES**

- * Provide Appliance allowance: \$10,000.00 /unit
- * Basis of Design:
- * Refrigerator: Counterdepth, 36" Wide, Stainless Steel
- * Range: 34" Wide Electric, Stainless Steel
- * Over the Range Microwave: Stainless steel
- * Dishwasher: 24" Stainless Steel dishwasher

DIV 12 FURNISHINGS**(12 2413) ROLLER WINDOW SHADES**

- * Shades: Perforated shade cloth, manual pull chain operation, MechoShade Systems Inc. "UrbanShade"

(12 3600) COUNTERTOPS

- * Quartz Agglomerate: Solid sheets consisting of quartz aggregates bound together with a matrix of filled plastic resin and complying with the "Physical Characteristics of Materials" Article
- * Adhesive: ANSI A118.3, Epoxy adhesive
- * Finished Edge: Eased
- * Granite: ASTM C615, NBGQA Standards.

DIV 21 FIRE SUPPRESSION**(21 0500) COMMON WORK RESULTS FOR FIRE PROTECTION**

- * Hydraulically designed automatic wet-pipe fire sprinkler system within the buildings.
- * Submit complete stamped and approved drawings and calculations prior to installation.
- * Pipe and Fittings: Standard weight black iron pipe with standard sprinkler fittings.
- * Sprinkler Heads: U.L. and F.M. approved.
- * Valves: U.L. listed and F.M. approved.
- * Installation to comply with NFPA 13 and State of California and local Fire Marshall requirements.

DIV 22 PLUMBING**(22 0502) GENERAL PLUMBING REQUIREMENTS**

- * Contractor's Responsibilities: Quality Assurance and Warranties.
- * Regulatory Requirements, Codes and Standards.
- * Permits and inspections.
- * Submittal requirements and substitutions procedures.
- * Whenever possible, all products and equipment used for similar service shall be from same manufacturer.
- * Conference with Owner before start of work.
- * Supervision - Full time.
- * Accessibility - Make all equipment and accessible.
- * Cleaning.
- * Operational tests and instructions, compliance tests, system start-up -Included.

(22 0523) GENERAL DUTY VALVES FOR PLUMBING PIPING

- * All valves of one manufacturer.
- * Include globe, ball, butterfly, gate, check, and plug valves.
- * Ball valves to be three piece.
- * 6" and smaller lever operated, 8" and larger gear operated.
- * Full lug pattern.
- * Manufacturer: Nibco, Stockham, Keystone.

(22 0529) HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT

- * Pipe support system complete.
- * Conform to ANSI B31.1.
- * Conform to MSS-SP-58 and MSS-SP-69.
- * Complete pipe support system and devices by Grinnell, Tolco, B-Line or Unistruct.
- * Upper attachment, anchors, pipe hangers, hanger rods, pipe riser clamps, pipe guides for a complete functional system.
- * Installation shall comply with ANSI Standards.
- * Prime and paint steel exposed to weather.

(22 0700) PLUMBING INSULATION

- * Insulation of ductwork, piping, and equipment.
- * Acoustical lining of ductwork.
- * Compliance with Title-24 Energy Conservation Code.
- * Heating Piping, Valves, and Fittings: Insulate with U.L. approved, flame resistant, white, all service jacketed, glass fiber blanket, insulation and pre-molded PVC covers (covers to be UL 25/50 rated).
- * Insulate air separators with 1-1/2" thick insulation.
- * Provide double wall construction at all insulated ductwork exposed to weather.
- * Ductwork: 1-1/2" thick, R-6 with foil face. All supply and return ductwork exposed to weather have 1-1/2" thick, R-6.5 insulation.
- * Conform to manufacturer's installation instructions.
- * No fiberglass products in air stream for clean rooms or surgical suites

(22 1116) DOMESTIC WATER PIPING

- * Potable water: Copper Type "L" pipe above ground and Type "K" below ground with wrought copper sweat fittings. Lead free solder joints. Pipe and fittings below grade, coated and wrapped.
- * Fuel gas: Schedule 40 black steel pipe with standard weight screwed fittings above grade and standard welding fittings below ground. Pipe and fittings below grade, coated and wrapped.
- * Installation to comply with California Plumbing Code.
- * Complete potable water disinfection.

(22 1313) FACILITY SANITARY SEWERS

- * Gravity Flow, Nonpressure Sewer Piping Applications - PVC.
- * Cleanouts.
- * Manholes.

(22 1316) SANITARY WASTE AND VENT PIPING

- * Waste and vent piping system, connect to existing, modify existing.

(22 1319) SANITARY WASTE PIPING SPECIALTIES

- * Floor drains
- * Floor sinks
- * Area drains
- * Roof and overflow roof drains
- * Hose bibbs
- * Accessories as shown on the drawings.
- * Floor drains, floor sinks, area drains, roof drains and overflow roof drains: Cast iron bodies, flashing flanges, cast iron or chrome plated grates. J.R. Smith, Zurn, Josam or equivalent.
- * Installation to comply with California Plumbing Code

(22 3300) ELECTRIC DOMESTIC WATER HEATERS

- * Hot water heater: electric.
- * Circulating Pump: All bronze, in-line. Bell and Gossett or Grundfos.
- * Flue: U.L. listed, double wall stainless steel.
- * Installation to comply with California Plumbing Code

(22 4000) PLUMBING FIXTURES

- * Provide Plumbing fixture allowance: \$5000.00/unit
- * Kitchen Faucet: Delta, Trinsic, Single Handle Pull-Down Kitchen Faucet, Arctic Stainless- Model # 9159-DST or SIM
- * Kitchen Sink: Stainless Steel 33" - Kohler, Cursiva All-in-One Single bowl undermount sink or SIM
- * Bathroom Faucet: Kohler, Hint, Matte Black, K-97060-4-BL or SIM
- * Bathroom Shower & Shower/tub faucet: Kohler, Pitch, Matte Black or SIM
- * Bathroom Toilet: Kohler, Santa Rosa Comfort Height, One-piece compact elongated 1.28 gpf chair height toilet w/ quiet-close, K-K-3810-0, White.
- * Water Heater: TBD
- * Shower stall: Sterling, Traverse, White #72500106 or SIM
- * Bath/Shower: Sterling, Traverse, White #7157012-0 or SIM

DIV 23 HEATING, VENTILATING, AND AIR CONDITIONING**(23 0502) GENERAL HVAC REQUIREMENTS**

- * Contractor's Responsibilities: Quality Assurance and Warranties.
- * Regulatory Requirements, Codes and Standards.
- * Permits and inspections.
- * Submittal requirements and substitutions procedures.
- * Whenever possible, all products and equipment used for similar service shall be from the same manufacturer.
- * Conference with Owner before start of work.
- * Supervision - Full time.
- * Accessibility - Make all equipment and accessible.
- * Cleaning.
- * Operational tests and instructions, compliance tests, system start-up -Included.

(23 0529) HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT

- * Pipe support system complete.
- * Conform to ANSI B31.1.
- * Conform to MSS-SP-58 and MSS-SP-69.
- * Complete pipe support system and devices by Grinnell, Tolco, B-Line or Unistruct.
- * Upper attachment, anchors, pipe hangers, hanger rods, pipe riser clamps, pipe guides for a complete functional system.
- * Installation shall comply with ANSI Standards.
- * Prime and paint shell exposed to weather.

(23 0593) TESTING, ADJUSTING AND BALANCING FOR HVAC

- * Testing of piping, ductwork and exhaust systems by independent company.
- * Balancing water and air distribution system.
- * AABC and SMACNA Standards.
- * Test and Balance Agency qualifications, certificates of calibration for instruments, sample test and balance form.
- * Pressure test all supply ductwork for VAV systems.
- * Test all rooms containing hoods for pressure control.
- * Pressure test all HVAC water, domestic water, sanitary waste and vent, storm drain and gas piping per applicable standards.
- * Provide complete written reports.

(23 0700) HVAC INSULATION

- * Insulation of ductwork, piping and equipment.
- * Acoustical lining of ductwork.
- * Compliance with Title-24 Energy Conservation Code.
- * Heating Piping, Valves, and Fittings: Insulate with U.L. approved, flame resistant, white, all service jacketed, glass fiber blanket, insulation and pre-molded PVC covers (covers to be UL 25/50 rated).
- * Insulate air separators with 1-1/2" thick insulation.
- * Provide double wall construction at all insulated ductwork exposed to weather.
- * Ductwork: 1-1/2" thick, R-6 with foil face. All supply and return ductwork exposed to weather have 1-1/2" thick, R-6.5 insulation.
- * Conform to manufacturer's installation instructions.

(23 0702) HVAC SYSTEM ACOUSTICAL LINING

- * Required at interior of ductwork.
- * Semi-rigid board or flexible fiberglass liner.
- * Non-fibrous foam based product.
- * Adhesives and mechanical fasteners.
- * Coat all exposed fiberglass edges.

(23 0900) INSTRUMENTATION AND CONTROL FOR HVAC

- * Direct digital controls.
- * Provide owner training and complete as-built drawings.
- * Fully integrated energy management system.

(23 3113) METAL DUCTS

- * Sheet Metal: Galvanized Steel Sheets: Shall be first quality, cold-rolled, galvanized, open-hearth, soft-steel sheets, capable of double seaming without fracture, meeting M 526 64T.
- * Duct construction to comply with UMC requirements and specific 1995 SMACNA tables for the pressure class indicated
- * Flexible ducts, U.L. Listed: Factory pre-insulated, spiral helix spring permanently bonded to an interior liner and sheathed in an exterior vapor barrier jacket.
- * Duct Gauges as Follows:
 - * 2" w.g. for low pressure systems and VAV return air.
 - * 4" w.g. for medium pressure systems.
- * Include accessories for a complete system.
- * Codes and Standards: U.L., ASTM, AMCA, SMACNA, NFPA, UMC, ASHRAE.
- * Fire Dampers: U.L. listed and State Fire Marshall approved.
- * Dampers: Ruskin.

(23 3600) AIR DUCT ACCESSORIES

- * Provide and install ductwork accessories complete for the air distribution system including manual volume dampers, combination fire and smoke dampers, sound attenuators (sound trap), access doors and test holes..
- * Manual volume damper shall be provided at each branch duct for supply, return, and exhaust air systems.
- * Combination fire and smoke dampers design and construction shall be in accordance with UL 555 and UL 555S. Manufacturer: Ruskin Model FSD 60 or approval equal.
- * Sound trap shall be factory assembled unit, tested and certified by independent testing laboratory for hospital application. Manufacturer: IAC, Vibracoustics.
- * Duct access door with gasket, hinged and double wall for insulated duct mounting. Manufacturer: Cesco, Milcon, Elmdor..
- * INdall Ventlock, No. 699 or 699-2 instrument test holes as required for pitot tube or temperature testing instruments..

(23 3713) AIR INLETS AND OUTLETS

- * Standard supply, return and exhaust, air devices
- * Conform to AMCA Standards.
- * Products to be aluminum.
- * Manufacturer: Titus, Anemostat, Krueger or equivalent.

(23 7300) AIR HANDLING UNITS

- * Supply and return/exhaust fans with variable frequency drives.
- * Stainless steel casing on cooling coils.
- * Viewing windows and marine lights on air handling units.
- * Plug fan SWSI AF centrifugal fans.
- * Double wall construction for clean room units.
- * Manufacturer: Energy Labs, Alliance Aire, Temtrol or equivalent.

(23 7513) ROOFTOP PACKAGED AIR CONDITIONING UNITS

- * Electric cooling type.
- * Horizontal or downdischarge.
- * Powered exhaust economizer.
- * Copper tube and fins in marine environments.
- * Spring vibration isolation curbs.
- * Manufacturer: Carrier, Trane, York, McQuay or equivalent.

DIV 26 ELECTRICAL**(26 0502) GENERAL ELECTRICAL REQUIREMENTS**

- * Contractor's Responsibilities: Quality Assurance and Warranties.
- * Regulatory Requirements, Codes and Standards.
- * Permits and inspections.
- * Coordination drawings with work of other trades.
- * Coordination of electrical components in electrical and communication rooms.
- * System short circuit and coordination study.
- * Submittal of Record Drawings.
- * Submittal of Operating and Maintenance Manuals.
- * Protection, delivery and storage requirements for electrical equipment.
- * Contractor required safety.
- * Guarantees and warranties.
- * Equipment testing requirements.
- * Cleaning.
- * Operational tests, operating instructions, operation manuals system acceptance and certification.
- * Fire alarms and Carbon Monoxide detectors installed throughout per NFPA and local code.

(26 5000) LIGHTING

- * Provide Decorative Lighting Fixture Allowance: \$1000.00/unit
- * Basis of Design:
- * General Lighting: 4" Basics Series - LED Retrofit Adjustable trim for standard 4" recessed housings; Juno, 4RLA G2 06LM or SIMILAR
- * Hall/Stairway light fixture F6: Globe Electric, Aura 12" 1-Light Bronze Semi-Flush Mount w/ Clear Glass outer shade and frosted inner shade - OR SIM
- * Exterior wall sconce: F10, Globe Electric, Maisel 1-Light Matte Black LED Integrated Outdoor/Indoor Wall Lantern Sconce - ORSIM
- * Dimmers: Lutron

DIV 28 ELECTRONIC SAFETY AND SECURITY**(28 3100) ADDRESSABLE FIRE ALARM SYSTEM**

- * New fire alarm system.
- * Initiating devices, complete coverage detection.
- * Visual and audio devices.
- * Building control panel and annunciator.
- * All conductors in conduit.
- * Testing procedures and verification reports

DIV 32 EXTERIOR IMPROVEMENTS**(32 1313) PORTLAND CEMENT CONCRETE PAVING**

- * Standards: ACI 301,304
- * Reinforcing: ASTM A615, Grade 60, deformed
- * Concrete: ASTM C94, ready- mixed, 3500 psi.
- * Curing Compound: ASTM C1315, Type I, Class A or B
- * Pavement Finish: Medium texture broom finish
- * Sidewalk Finish: Fine texture broom finish