

Project Manual / Specifications



PARISI DUNNE REMODEL

200 Dardenelle
Pacifica, CA 94044

Project No. 0915

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DOCUMENT 00700 - GENERAL & SUPPLEMENTARY CONDITIONS

- A. **General Conditions:** The General Conditions of the Contract for Construction, AIA Document A201, 1997 Edition, Articles 1 through 14 inclusive, is a part of this Contract, and is incorporated herein as fully as if here set forth.
 - 1. A copy of the General Conditions will be made available by the Architect upon request.
- B. **Division 1:** Where provisions of General Conditions relate to project administration or work-related requirements of the Contract, those paragraphs are expanded in Division 1 - General Requirements.
 - 1. General Conditions, Supplementary Conditions and Division 1 - General Requirements contain information necessary for completion of every part of Project.
 - 2. Where items of work are done under subcontracts, each item shall be subject to these conditions.
- C. **Supplementary Conditions:** The following supplements modify, change, delete from or add to General Conditions of the Contract as indicated above.
 - 1. Where any part of the General Conditions is modified or deleted by these supplements, unaltered provisions of the modified article, paragraph, subparagraph or clause shall remain in effect.

ARTICLE 1: CONTRACT DOCUMENTS

ADD to 1.1 the following definitions:

1.1.8 **Approved:** The terms approved, directed, selected, required, ordered, designated, accepted, acceptable and satisfactory shall require written action by Architect.

1.1.9 **Equal, or Approved Equal:** The terms equal or approved equal shall require requests for substitutions for products or manufacturers not specified; requests for substitutions shall be in accordance with requirements of Section 01600 - Materials and Equipment.

1.1.10 **Furnish:** The term furnish means supply and deliver to Project, unless otherwise defined in greater detail.

1.1.11 **Install:** The term install is used to describe operations at Project, from inspecting and unloading, to completion in place, ready for intended use.

1.1.12 **Provide:** The term provide means furnish and install, complete and ready for intended use, unless otherwise defined in greater detail.

ADD the following to Subparagraph 1.2.1:

1.2.1.1 **Inconsistencies:** In case of an inconsistency between Drawings and Specifications or within other Contract Documents not clarified by addendum, provide better quality or greater quantity of Work in accordance with Architect's interpretation.

ARTICLE 3: CONTRACTOR

ADD the following to Subparagraph 3.4.2:

3.4.2.1 **Substitutions:** After Contract has been executed, the Owner and Architect will consider formal requests for substitution of products in place of those specified only under conditions set forth in Section 01600 – Product Requirements.

ARTICLE 5: SUBCONTRACTS

ADD the following 5.3:

5.3.2 **Materials Suppliers:** Contractor agrees to bind in writing all subcontractors and materials suppliers to terms of General and Supplementary Conditions of the Contract for Construction and to terms of entire agreement between Owner and Contractor.

ARTICLE 11: INSURANCE AND BONDS

ADD the following to 11.1.2:

11.1.2.1 **Insurance Amounts:** Amount of insurance shall be as approved by Owner. When additional insurance is required, Owner reserves right to negotiate difference in cost directly with Contractor's Insurance Carrier.

ADD the following to 11.1.3:

11.1.3.1 **Certificate of Insurance:** Furnish one copy of each Certificate of Insurance required for each copy of Agreement.

11.1.3.1.1. Form of certificate shall be an approved certificate which specifically sets forth evidence of all coverage required.

11.1.3.1.2 Furnish to Owner copies of any endorsements subsequently issued amending coverage or limits.

11.1.3.2 Upon receipt of any notice of cancellation or alteration, Contractor shall, within five days, procure other policies of insurance similar in all respects to policy or policies about to be canceled or altered.

11.1.3.2.1 If Contractor fails to provide acceptable policies of insurance, Owner may obtain such insurance at cost and expense of Contractor.

ADD to 11.5 the following bond requirements:

11.5.3 **Bonds Values:** To be negotiated between Owner and Contractor.

END OF DOCUMENT

SECTION 01110 - SUMMARY OF WORK

PART 1 - GENERAL

- A. Summary: Project consists of construction for the Parisi Dunne Remodel, 200 Dardenelle, Pacifica, California 94044, as indicated in Contract Documents.
- B. Work Sequence: Coordinate construction schedule, operations, and use of premises with Architect and Owner.
- C. Coordination: Coordinate construction operations included in various Specifications sections to ensure efficient and orderly installation of each part of Work.
 - 1. Coordinate construction operations that depend on each other for proper installation, connection, and operation. Coordinate work to assure efficient and orderly sequence of installation of construction elements.
- D. Contractor Use of Premises: Limit to areas indicated on Drawings and as specified; limit access as directed by Owner; do not disturb use of adjacent buildings and areas.
 - 1. Building will not be occupied prior to Substantial Completion.
- E. Field Engineering: Establish grades, lines, and levels by use of recognized professional surveying and engineering practices.
- F. Regulatory Requirements: Architect has contacted governing authorities and reviewed design requirements of local, state and federal agencies for applicability to Project.
 - 1. Contractor shall be responsible for contacting governing authorities directly for necessary information and decisions bearing upon performance of Work.
- G. Reference Standards: For Products specified by association or trade standards, comply with requirements of referenced standard, except when more rigid requirements are specified or required by applicable codes.
 - 1. Applicable date of each standard is that in effect as of Proposal date, except when a specific date is specified.
- H. Owner Furnished, Contractor Installed Products: Select products are to be furnished and paid for by Owner and installed by Contractor:
 - 1. Owner's Responsibilities:
 - a. Arrange for and deliver shop drawings, product data, and samples to Contractor.
 - b. Arrange and pay for product delivery to site.
 - c. Inspect products jointly with Contractor on delivery.
 - d. Submit claims for transportation damage.
 - e. Arrange for replacement of damaged, defective, or missing items.
 - f. Arrange for manufacturer's warranties, inspections, and service.
 - 2. Contractor's Responsibilities:
 - a. Review shop drawings, product data, and samples.
 - b. Receive and unload products at site.
 - c. Inspect jointly with Owner for completeness and damage.
 - d. Handle, store, and install products.
 - e. Finish products as required after installation.
 - f. Repair or replace items damaged by Work of this Contract.

END OF SECTION

SECTION 01300 – ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

- A. Submittals: Transmit each item under AIA Form G810 or a similar form; distribute copies of reviewed submittals to concerned persons; instruct recipients to promptly report any inability to comply.
 - 1. Contractor shall review and approve submittals prior to submitting to Architect; inform Architect at time of submission of any proposed deviation from Contract Documents.
 - 2. Submittal by Contractor represents field measurements, catalog numbers, and similar data have been determined and verified by Contractor.
 - 3. Review of submittals by Architect is for design concept only and is not to be construed as approving departures from Contract Documents.
- B. Progress Schedules: Submit electronic construction progress schedule with separate item for each major trade or operation, identifying first day of each week.
 - 1. Format: Submit horizontal bar chart; Contractor's computerized system using critical path method may be submitted where approved by Architect.
- C. Schedule of Values: Submit electronic schedule on AIA Form G703 or another approved 8-1/2" by 11" format; Contractor's standard media-driven format will be considered on request.
- D. Shop Drawings: Submit three reproducible prints; minimum sheet size 8-1/2" by 11"; after Architect review, reproduce and distribute. Electronic submittals are preferred.
- E. Product Data: Mark each copy to identify applicable Products, models, options, and other data; supplement manufacturers' standard data to provide information unique to the Work; include installation instructions.
- F. Samples: Submit full range of manufacturers' standard colors, textures, and patterns for Architect's selection; include identification on each sample, giving full information.
 - 1. Submit three samples unless otherwise specified; Architect will retain one sample; maintain one set of approved samples at Project Field Office.
- G. Certificates: Submit certificates, in duplicate, in accordance with requirements of Specification section. Electronic submittals are preferred.
- H. Coordination: Coordinate use of premises and access to site under direction of Owner; coordinate work to assure efficient and orderly sequence of installation of construction elements.
 - 1. Make provisions for Owner installed items and for separate contracts.
 - 2. Verify characteristics of interrelated operating equipment are compatible; coordinate work having interdependent responsibilities for installing, connection to, and placing such equipment in service.
 - 3. Coordinate space requirements and installation of mechanical and electrical work; conceal pipes, ducts, and wiring in finished areas; coordinate locations of fixtures and outlets with finishes.
 - 4. Coordination Drawings: Submit coordination drawings indicating locations for sprinkler system, piping, ducts, electrical work, structure, and exposed finishes in areas where space appears limited to avoid conflicts during construction operations.
- I. Meetings: Schedule and administer Project meetings throughout progress of Work; record minutes and distribute copies within two days to Architect, participants, and those affected.

END OF SECTION

SECTION 01400 - QUALITY REQUIREMENTS

PART 1 - GENERAL

- A. General Quality Control: Maintain quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Manufacturer's Field Services: When specified in respective specification sections, require manufacturer or supplier to have qualified personnel provide on-site observations and recommendations.
 - 1. Representative shall:
 - a. Observe field conditions, including conditions of surfaces. Observe quality of workmanship and methods of installation.
 - b. Provide recommendations for installation and workmanship.
 - c. Where required, start, test, and adjust equipment as applicable.
 - d. Submit written report to Architect of observations.
- C. Mock-Ups: Erect field samples and mock-ups at Project site in accordance with requirements where included in Specification section.
- D. Testing Laboratory Services: Provide testing laboratory services required by local authorities for conformance to applicable codes and not specified as provided by Owner.
 - 1. An independent testing laboratory shall perform inspections, tests, and other services required by various Specification sections.
 - 2. Owner will employ and pay for testing laboratory services except for retesting required by non-conformance to specified requirements which shall be charged to Contractor.
 - 3. Services will be performed in accordance with requirements of governing authorities, with specified standards and Specifications.
 - 4. Reports will be submitted to Architect in duplicate giving observations and results of tests, indicating compliance or non-compliance with specified standards and with Contract Documents.
 - a. Where required, testing laboratory shall submit copy of test results directly to enforcing agency.
 - 5. Contractor shall cooperate with testing laboratory personnel; furnish tools, samples of materials, design mix, equipment, storage and assistance as requested.
 - 6. Notify Architect and testing laboratory sufficiently in advance of expected time for operations requiring testing services.

END OF SECTION

SECTION 01500 – TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

- A. General: Provide temporary construction facilities and temporary controls as required to complete Project in accordance with Contract Documents and to conform to requirements of applicable authorities.
 - 1. Contract governing authorities to establish extent of temporary facilities and temporary controls required by authorities.
 - 2. Owner is presently paying for electrical and water utilities on-site. Construction team may connect to Owner's services and Owner will pay utility companies for utilities used from existing on-site services.
- B. Temporary Power: Provide power service and lighting required for operations, with branch wiring and distribution boxes located to allow service and lighting by means of construction-type power cords.
- C. Temporary Water and Sanitary Services: Provide and maintain required drinking water and sanitary facilities with enclosures.
- D. Noise, Dust, and Pollution Control: Provide materials and equipment necessary to comply with local requirements for noise, dust, and pollution control.
- E. Barriers: Provide as required to protect adjacent properties from damage from operations; and as required by governing authorities. Provide protection for existing trees and landscaping to prevent damage during construction operations.
 - 1. Security: Maintain site and materials secure during construction period.
- F. Cleaning: Control accumulation of waste materials and rubbish; dispose of off-site at intervals approved by Architect and acceptable to applicable authorities.
- G. Signs: Subject to approval of Owner and Architect.
- H. Field Telephone Service: Unless otherwise approved maintain access to on-site field supervision by cellular telephone service during construction operations. Keep Owner and Architect up-to-date on supervisors, cell phone numbers, and on-site schedule.
 - 1. Where field office is included maintain computer system at field office with internet access and with digital camera available for communications with Owner and Architect.
- I. Storage: Limit on-site storage to areas designated for construction operations and approved in advance by Owner; provide additional weather-tight, secured off-site storage as required.
- J. Site Waste Management: Comply with site waste management requirements of applicable authorities. Effect optimum control of solid wastes. Prevent environmental pollution and damage.
 - 1. Construction Waste: Includes solid wastes, such as building materials, packaging, rubbish, debris, and rubble resulting from construction, remodeling, repair, and demolition operations.
 - 2. Submittals: Furnish as required by applicable authorities.
 - 3. Handling: Keep materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to recycling process. Clean materials which are contaminated prior to placing in collection containers.
 - a. Arrange for collection by or delivery to appropriate recycling center or transfer station that accepts construction and demolition waste for purpose of recycling.
 - 4. Participate in Re-Use Programs: Rebates, tax credits, and other savings obtained for recycled or re-used materials shall accrue to Contractor.
- K. Removal and Cleaning: Remove construction facilities, clean and repair damage, in excess of Contract requirements, caused by operations or use of temporary facilities.

END OF SECTION

SECTION 01600 – PRODUCT REQUIREMENTS

PART 1 - GENERAL

- A. Contract Amount: Base on materials and products in Contract Documents; where listed in Contract Documents, materials and products by manufacturers not listed shall not be used without written approval.
- B. Products: Components supplied in quantity shall be interchangeable; provide new materials unless otherwise directed in Contract Documents.
- C. Installation: Install items plumb, level and secure, and in correct relation to adjacent products; secure in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.
 - 1. Comply with manufacturer recommendations and installation instructions except where more stringent requirements are specified.
- D. Transportation: Transport products to avoid product damage, deliver in undamaged condition in manufacturer's unopened containers or packaging.
- E. Handling: Provide equipment and personnel to handle products by methods to prevent soiling and damage; promptly inspect to assure products are correct, complete, and undamaged, and quantities are correct.
- F. Storage: Store material in accordance with manufacturer instructions, with seals and labels intact and legible.
- G. Protection: Provide coverings to protect products from damage from traffic and construction operations, remove when no longer needed.
- H. Specified Products: For products specified by naming one or more products or manufacturers, select products of any named manufacturer meeting Specifications.
- I. Substitutions: For product or manufacturer that is not specifically named submit request for substitution; within a period of 30 days after award of Contract, Architect will consider requests for substitutions.
 - 1. Submit separate request for each proposed substitution with data relating to changes in cost and construction schedule; note effect of substitution on other work, products, or separate contracts.
 - 2. Include accurate cost data comparing proposed substitution with product and amount of net change in Contract price.
 - 3. Do not order substitute products without written acceptance; Architect will determine acceptability of proposed substitutions and reserves right to reject due to insufficient information.
 - 4. Requests indicate Contractor has investigated product and it meets or exceeds specified product, will provide same warranty, and waives claims for additional costs that subsequently become apparent.

END OF SECTION

SECTION 01700 – EXECUTION REQUIREMENTS

PART 1 - GENERAL

- A. Installer Qualifications: Installers to have minimum five years successful experience installing items similar to those required for Project, except for individuals in training under direct supervision of experienced installer.
- B. Examination: Beginning installation of a product signifies installer has examined substrates, areas, and conditions for compliance with manufacturer requirements for tolerances and other conditions affecting performance.
- C. Manufacturer's Instructions: When work is specified to comply with manufacturers' recommendations or instructions, distribute copies to persons involved, and maintain one set in Field Office.
- D. Installation: Comply with manufacturer's written recommendations and installation instructions unless more restrictive requirements are specified.
- E. Substantial Completion: Provide documentation stating Work has been substantially completed. Where Owner requires use of space prior to final completion, provide list of items to be completed.
 - 1. Architect will review list of any items to be completed and supplement list with items considered to be incomplete or unacceptable.
- F. Final Completion: Provide written certification indicating Work is in compliance with Contract Documents, systems have been tested and are operational, and Work is ready for final inspection. Submit written certification indicating the following.
 - 1. Work has been inspected for compliance with Contract Documents and Work has been completed in accordance with Contract Documents and that deficiencies noted by Architect and Owner has been corrected.
- G. Special Submittals: Submit final statement of accounting giving total adjusted Contract Sum, previous payments, and sum remaining due.
- H. Final Cleaning: Clean interior and exterior surfaces exposed to view, remove temporary labels, stains, and foreign substances; polish transparent and glossy surfaces; vacuum carpeted and soft surfaces; clean ducts; remove waste, surplus materials and rubbish from Project and site.
 - 1. Clean equipment and fixtures to a sanitary condition, clean or replace equipment filters.
- I. Project Record Documents: Keep documents current; do not permanently conceal any work until required information has been recorded. Indicate actual work on Drawings; indicate actual products used in Project Manual, including manufacturer, model number and options.
- J. Data: Provide material, finish, and maintenance data submitted by manufacturers bound in three ring binders, organized in format similar to Specifications.
- K. Cutting and Patching: Cut, fit, and patch as required to complete Work. Make its parts fit together properly; match existing typical. Uncover work to provide for installation of ill-timed work.
 - 1. Remove and replace defective work and nonconforming work. Remove samples of installed work as required for testing.
- L. Protection: Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation and trapping water.
- M. Warranties: Provide warranties as required by Specifications and where provided by manufacturers for products specified. Provide duplicate copies, notarized or on Contractor letterhead, countersigned by manufacturer.
 - 1. Warranties for waterproofing and roofing are to be countersigned by subcontractor and installer.
 - 2. Rejection of Warranties: Owner reserves right to reject unsolicited and coincidental product warranties which detract from or confuse interpretations of Contract Documents.
- N. Demonstrations: Prior to final inspection, demonstrate operation of each system to Owner.

END OF SECTION

SECTION 01735 – DECONSTRUCTION

PART 1 - GENERAL

- A. Summary: Carefully deconstruct existing structures; remove materials, systems, components, fixtures and equipment for donations as directed by Owner.
 - 1. Cover and protect existing materials when deconstruction work is performed in areas where materials have donation value.
 - 2. Prevent movement of adjacent construction, provide and place bracing and be responsible for safety and support of adjacent construction. Assume liability for movement of adjacent construction, for damage, and for injury.
 - 3. Cease operations and notify Owner and Architect immediately if safety of structure appears to be endangered; take precautions to properly support structure. Do not resume operations until safety is restored.
- B. Existing Services: Disconnect or remove utility services.
 - 1. Place markers to indicate location of disconnected services; identify service lines and capping locations on Project Record Documents.

PART 2 - PRODUCTS

- A. Materials: Salvage as much existing materials as possible for donation as directed by Owner. materials being demolished not suitable for donation to be immediately removed from site.
 - 1. Carefully remove, store and protect materials suitable for donation.
 - 2. Immediately remove from site wet materials and materials with water stains, with mold, and with mildew.
 - 3. Obtain Owner's direction prior to beginning deconstruction/selective demolition regarding materials to be salvaged and coordinate with Owner regarding materials to be donated.
 - 4. Carefully remove materials indicated to be donated; deliver where directed when donation is within 10 miles of Project.

PART 3 - EXECUTION

- A. Deconstruct appurtenances in an orderly and careful manner. Use methods which do not damage materials indicated to be donated.
- B. Perform deconstruction in accordance with authorities having jurisdiction. Remove materials not suitable for donation from site, unless otherwise directed.
 - 1. Remove from site, contaminated, vermin infested, and dangerous materials encountered and dispose of by safe means so as not to endanger health of workers or public.
- C. Cap and identify active utilities.

END OF SECTION

SECTION 05500 - METAL FABRICATIONS

PART 1 - GENERAL

- A. Summary: Provide stock and custom fabricated metal items complete in respect to function as intended and not part of structural steel or systems specified elsewhere.
 - 1. Ornamental metals are in Section 05700.
- B. Submittals: Furnish shop drawings for custom fabrications, product data for manufactured items; provide templates for anchor installation by others.

PART 2 - PRODUCTS

- A. Steel Shapes, Plates and Bars: ASTM A36.
- B. Structural Steel Sheet: Hot rolled, ASTM A570; or cold rolled, ASTM A611, Class 1; of grade required for design loading.
- C. Steel Pipe: ASTM A53, Type S seamless, grade as selected by fabricator and as required for design loading; minimum standard weight, STD or Schedule 40.
- D. Steel Tubing: Cold formed ASTM A500; or hot rolled, ASTM A501; minimum Grade B; seamless where exposed.
- E. Castings: Gray iron, ASTM A48, Class 30; malleable iron, ASTM A47.
- F. Aluminum: Provide alloy and temper recommended by aluminum producer or finisher for type and use and finish indicated; sized for strength and durability consistent with application involved.
- G. Grout: ASTM E827, non-shrink, non-metallic, pre-mixed, factory-packaged, non-staining, non-corrosive; type specifically recommended by manufacturer as applicable to job condition.
- H. Brackets and Anchors: Unexposed plates, angles and supports may be steel; exposed items to match ornamental metal type and finish.
- I. Fasteners: Type required for specific usage; provide zinc-coated fasteners for exterior use or where built into exterior walls; provide concealed fasteners except where specifically approved; where exposed match type and finish of metal being fastened.
 - 1. Concealed Steel Fasteners: Hot-dipped galvanized minimum G90 where built into exterior walls or subject to high humidity.
- J. Welding Materials: AWS D1.1, type required for materials being welded.
- K. Paint: Provide primers as recommended by paint manufacturers for substrates and paints specified in Section 09900 – Paints and Coatings.
 - 1. Galvanizing Repair Paint: High zinc-dust content paint for reglvanizing welds in galvanized steel.
- L. Fabrication: Fabricate items with joints neatly fitted and properly secured; grind exposed welds continuous, smooth and flush with adjacent finished surfaces, and ease exposed edges to approximate 1/32" uniform radius.
 - 1. Make exposed joints flush butt type, hairline joints where mechanically fastened.
 - 2. Pre-Engineered Support Systems: Unistrut or Grinnell/PowerStrut manufactured pre-engineered support system consisting of minimum 12 gage "C" channel supports with anchors, attachments, and accessories as required for complete installation.
 - 3. Finishes: Unless otherwise scheduled, G90 galvanize and prime paint exterior work and prime paint interior work; comply with requirements of Section 09900 – Paints and Coatings for preparation and priming.
 - 4. Exposed-to-view surfaces exhibiting pitting, seam marks, roller marks, "oil canning," stains, discolorations, and imperfections on finished units are not acceptable.
 - 5. Make exposed joints flush butt type, hairline joints where mechanically fastened; provide concealed connection devices with hidden fasteners.
 - 6. Separate dissimilar materials with bituminous paint where concealed, with preformed separators, or similar method to prevent corrosion.

PART 3 - EXECUTION

- A. Installation: Install items square and level, accurately fitted and free from distortion or defects detrimental to appearance or performance; ensure alignment with adjacent construction; coordinate with related work to ensure no interruption in installation.
- B. After installation, touch-up field welds and scratched and damaged surfaces; use primer consistent with shop coat or recommended for galvanized surfaces, as applicable.
- C. Prior to securing continuous items, adjust to ensure proper matching at butt joints and correct alignment throughout their length.

END OF SECTION

SECTION 05700 - ORNAMENTAL METALS

PART 1 - GENERAL

- A. Work Included: Provide ornamental metal items including attachment devices and accessories, as required for complete, finished installation.
 - 1. Provide custom exterior and interior break metal aluminum shapes including fascia at windows and at roof eyebrows:
- B. Design Requirements: Drawings indicate ornamental metal sizes and shapes; unless otherwise specifically indicated, design components and fabrications of gages and thicknesses to withstand anticipated loads.
- C. Submittals: Furnish product data, shop drawings, and samples.
- D. Fabricator: Firm with minimum five years successful experience fabricating ornamental metal items similar to those required for Project.

PART 2 - PRODUCTS

- A. Aluminum: ASTM B209, not less than 6061-T6 sheet; not less than 0.05" thick.
 - 1. Finish: Clear anodized; AA-M12C22A31/41, Class I or II, AAMA 607.1.
- B. Brackets and Anchors: Unexposed plates, angles and supports may be corrosion resistant non-magnetic stainless steel; exposed items to match ornamental metal type and finish.
- C. Fasteners: Type required for specific usage; provide concealed fasteners except where specifically approved; where exposed match type and finish of metal being fastened.
- D. Fabrication: Fabricate component connections to support specified design loads.
 - 1. Comply with Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Architectural Sheet Metal Manual for general brake form shapes.
 - 2. Select materials for straightness, free of defects and irregularities.
 - 3. Exposed-to-view surfaces exhibiting pitting, seam marks, roller marks, "oil canning," stains, discolorations, and imperfections on finished units are not acceptable.
 - 4. Make exposed joints flush butt type, hairline joints where mechanically fastened; provide concealed connection devices with hidden fasteners.
 - a. Fabricate joints exposed to weather in manner to exclude water or provide weep holes where water could accumulate.
 - 5. Separate dissimilar materials with bituminous paint where concealed, with preformed separators, or similar method to prevent corrosion.

PART 3 - EXECUTION

- A. Install ornamental metal items in accordance with manufacturer's recommendations, installation instructions, and approved shop drawings.
- B. Install plumb, true and in correct relation to adjacent work, free from distortion or defects detrimental to appearance and performance.
- C. Prior to securing continuous items, adjust to ensure proper matching at butt joints and correct alignment throughout their length.
- D. Repair or replace items damaged or marred during construction.

END OF SECTION

SECTION 06200 - FINISH CARPENTRY

PART 1 - GENERAL

- A. Summary: Provide interior wood trim, including wood door frames and jambs, wood closet and storage shelving, wood closet poles, furring for beams, and accessories and items specified.
 - 1. Casework is in Section 06400.
- B. Standards: Perform finish carpentry in accordance with Architectural Woodwork Standards, Edition 1, 2009 (AWS).
- C. Submittals: Furnish product data for trim and jamb shapes, samples of each exposed finish.
- D. Certification: AWS certification will not be required however Owner reserves right to retain Woodwork Institute if quality of work is questionable.
- E. Delivery, Storage and Handling: Comply with AWS standards and manufacture recommendations.

PART 2 - PRODUCTS

- A. Wood Decking, Transparent/Stained Finished: WI MoM/Premium Grade, Ipe (Ironwood); factory fabricated.
- B. Interior Trim, Opaque Painted: AWS/Custom Grade, Birch or Poplar, surfaced, unless otherwise indicated.
- C. Wood Shelving: AWS/Custom Grade, for opaque paint finish. Provide wood board shelves, minimum 3/4" thick.
 - 1. Wood Supports: WI MoM/Custom Grade, softwood for opaque finish.
- D. Wood Closet Poles: Standard 1-3/8" wood closet poles with end brackets; provide intermediate brackets where over 4'-0" long.
- E. Anchors, Nails and Screws: Select the material, type, size and finish required by each substrate for secure anchorage; provide toothed steel or lead expansion bolt screws for drilled-in-place anchors.
- F. Wood Filler: Color to match wood being filled.
- G. Fabrication: Fabricate finish carpentry items in accordance with specified quality standard.

PART 3 - EXECUTION

- A. Install work consistent with specified WI MoM quality grade, plumb, level, true and straight with no distortions; shim as required, using concealed shims.
- B. Install IPE deck, sealing fresh cuts within 24 hours with deck manufacturer's recommended sealant. Apply sealant in accordance with manufacturer's directions; use applicators and techniques best suited for substrate and type of material being applied. Fasten decking with stainless steel screws, comply with manufacturer's recommendations.
- C. Install trim in single, unjointed lengths for openings and for runs less than 10'-0"; for longer runs use only one piece less than 10'-0"; provide scarf joints between members, stagger joints in adjacent members; miter corners.
- D. Preparation for Field Finishing: Sand work smooth and set exposed nails and screws; apply wood filler in exposed nail and screw indentations and leave ready to receive site-applied finishes.
 - 1. Seal concealed and semi-concealed surfaces; brush apply only, using primer consistent with finish coats specified under Section 09900 – Paints and Coatings.

END OF SECTION

SECTION 06400 - ARCHITECTURAL WOODWORK

PART 1 - GENERAL

- A. Summary: Provide fabricated architectural woodwork and cabinetwork, including countertops and cabinet hardware, soffits, ceilings, and woodwork indicated.
 - 1. Finish carpentry including interior trim is in Section 06200.
- B. Standards: Perform architectural woodwork in accordance with Architectural Woodwork Standards, Edition 1, 2009, (AWS).
 - 1. Certification Program: Comply with Woodwork Institute certification program.
- C. Submittals: Furnish product data for manufactured items, shop drawings for custom fabrications, and samples of exposed materials.
- D. Delivery, Storage and Handling: Comply with AWS and manufacturer recommendations.

PART 2 - PRODUCTS

- A. Manufacturers: Members of Woodwork Institute with minimum five years successful experience fabricating architectural woodwork similar to that required for Project.
 - 1. Particleboard: Provide Medite Corp. (Sierrapine) Medite II or Rodman Industries/Resincore I with no added formaldehyde and made from recycled wood products.
- B. Transparent/Stained Finished Casework: AWS/Premium Grade, flush overlay type; hardwood edges matching veneers; veneers as indicated under finishing requirements, minimum 0.036" thick; semiexposed surfaces Birch stained to match veneers.
 - 1. Wood Veneers: As indicated on the Product Schedule.
- C. Countertops: As indicated on the Product Schedule.
- D. Transparent/Stained Finished Wood Paneling, Soffits, and Ceilings: WI MoM/Premium Grade, types as indicated.
 - 1. Board Soffits: WI MoM/Premium Grade, Clear Western Red Cedar, tongue and groove square edge 1x6 wood boards.
 - 2. Board Ceilings: WI MoM/Premium Grade, Clear Western Red Cedar, tongue and groove square edge 1x6 wood boards.
- E. Casework Hardware: Provide casework hardware items as indicated in Product Schedule and as required for complete installation as indicated; provide types as listed in Product Schedules, types in AWS where not otherwise indicated, but no less than following types.
 - 1. Plug-In Pin Type Shelf Supports: Provide holes 1" on center.
 - 2. Cabinet Hinges: European concealed type, 160 degree opening, with spring closer.
 - 3. Cabinet Pulls: TBS
 - 4. Drawer Slides: Self closing full extension, Blum/Blumatic, Solo, and Metabox.
 - 5. Cabinet Locks: Pin and tumbler slide bolt lock, two keys each.
- F. Fasteners: Select material, type, size and finish required by each substrate for secure anchorage; provide toothed steel or lead expansion bolt screws for drilled-in-place anchors.
- G. Wood Filler: Color to match wood being filled.
- H. Fabrication: Fabricate architectural woodwork in accordance with specified quality standard.
 - 1. Assemble in sizes easily handled and to ensure passage through building openings.
- I. Transparent/Stained Finished Woodwork: AWS/Premium Grade veneers as indicated on Product Schedule; veneering as directed by Architect where not otherwise indicated.
 - 1. Sand work smooth; seal, stain and varnish concealed and semi-concealed surfaces of transparent finished woodwork; brush apply.
 - 2. Transparent/Stained Finish: AWS/Premium Grade finish producing dull rubbed effect, as approved by Architect.

PART 3 - EXECUTION

- A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication where possible; do not delay job progress, allow for trimming and fitting.

- B. Installation: Install work consistent with specified quality grade, plumb, level, true and straight with no distortions. Scribe and cut for accurate fit to other finished work.
- C. Preparation for Field Finishing: Sand work smooth and set exposed nails and screws; apply wood filler in exposed nail and screw indentations and leave ready to receive site-applied finishes.
 - 1. Seal concealed and semi-concealed surfaces; brush apply only, using primer consistent with finish coats specified under Section 09900 – Paints and Coatings.

END OF SECTION

SECTION 07210 – BUILDING INSULATION

PART 1 - GENERAL

- A. Work Included: Provide thermal batt insulation with vapor retarder and accessories as required for complete installation.
- B. Flame Spread/Smoke Density Rating: Maximum 25/450, ASTM E84.
- C. Submittals: Furnish product data.

PART 2 - PRODUCTS

- A. Thermal Batt Insulation: Preformed slag mineral or glass fiber with thermosetting resin binders, conforming to ASTM C665.
 - 1. Manufacturers: USG/Thermafiber FS25; Johns Manville/FSK-25 Thermal-Shield; or Owens-Corning Fiberglas/Fiberglas FS-25.
 - 2. R-Values: Minimum R-21 at walls, R-30 at floors, and R-38 at ceilings, unless otherwise indicated.
 - 3. Vapor Retarder: Type III, aluminum vapor retarder on one side.
 - 4. Vapor Retarder Tape: Minimum 2" wide self-adhering type designed to maintain vapor retarder integrity and complying with fire resistance ratings as required by applicable codes.
- B. Acoustical Insulation: ASTM C665, Type I unfaced acoustical insulation, ASTM C919 and outlet, switch, and telephone box acoustical pads.
 - 1. Provide at all interior walls and floors unless otherwise indicated.
- C. Accessories: Furnish as recommended by insulation manufacturers for types, substrates, and conditions involved.

PART 3 - EXECUTION

- A. Preparation: Verify substrate and adjacent materials are dry and ready to receive insulation; beginning installation signifies acceptance of conditions.
 - 1. Ensure mechanical and electrical items affecting work are properly placed, complete, and have been inspected by Architect prior to commencement of installation.
- B. Batt Insulation Installation: Install insulation in accordance with manufacturer's recommendations and installation instructions. Cut and trim insulation neatly, to fit spaces. Use faced insulation free of ripped backs and edges.
 - 1. Fit insulation tight within spaces and tight to and behind mechanical and electrical services within insulation plane; leave no gaps or voids; maintain integrity of thermal and acoustical barrier.
 - 2. Friction fit in place; use tape or penetration supports as necessary to assure permanent installation.
 - 3. Taping: Tape joints and tears in vapor retarder, including joints between insulation and surrounding construction, to ensure vapor-tight installation.

END OF SECTION

SECTION 07265 – BUILDING ENVELOPE UNDERLAYMENT

PART 1 - GENERAL

- A. Summary: Provide building envelope underlayment including wall building paper underlayment, flashing and sheet metal underlayment, and at penetrations through underlayment, with accessories as required for complete watertight installation.
 - 1. Provide concealed sheet metal flashings integral with underlayment installation.
- B. Submittals: Furnish product data; furnish samples of each type of underlayment.
- C. Pre-Installation Conference: Convene one week prior to commencing work; require attendance of parties directly affecting underlayment; review procedures and coordination.
- D. Warranty: Correct failure of underlayment to resist penetration of water; repair underlayment and pay for or replace damaged materials or surfaces; warranty period two years.

PART 2 - PRODUCTS

- A. Wall Underlayment: Provide Grade D water-vapor permeable kraft building paper conforming to Uniform Building Code Standard 14-1, Grade D, 60 minute water resistance (based on Fed Spec UU-B-790a), commonly referred to as Grade D 60 minute building paper.
- B. Sheet Metal and Flashing Underlayment: Grace, Carlisle, or Protecto Wrap rubberized sheet membrane with primers and seam sealers as required for complete watertight installation; provide specific material as recommended by manufacturer for specific application.
- C. Membrane Flashing at Penetrations: Grace, Carlisle, or Protecto Wrap rubberized sheet membrane with primers and seam sealers as required for complete watertight installation; provide specific material as recommended by manufacturer for specific application.
- D. Concealed Metal Flashings Integral with Underlayments: Minimum 24 gage thick steel with minimum G90 galvanized coating; comply with general requirements for materials and fabrication specified in Section 07600 – Flashing and Sheet Metal.
- E. Bituminous Paint: Acid and alkali resistant type; black color.
- F. Plastic Cement: Cutback asphaltic type with mineral fiber components, for sealing and coating flashings in buildings; free of toxic solvents and free of asbestos; material to be capable of setting within 24 hours at temperatures of approximately 75 degrees F and 50% R.H
- G. Volatile Organic Compound (VOC) Emissions: Provide materials conforming to applicable air quality management district limitations on volatile organic compound (VOC) emissions.

PART 3 - EXECUTION

- A. Preparation: Install underlayment over dry surfaces free of ridges, warps and voids that could damage underlayment; coordinate with installation of items projecting through underlayment.
- B. Concealed Sheet Metal Installation: Comply with requirements specified in Section 07600 – Flashing and Sheet Metal.
- C. Underlayment Installation: Comply with underlayment manufacturer recommendations and installation instructions
 - 1. Provide two layers of building paper underlayment at walls in accordance with applicable code requirements; apply plastic cement to substrate prior to application of underlayment starter strips to prevent capillary movement of water back up beneath underlayment.
 - 2. Provide one layer of sheet membrane underlayment at other locations.
 - 3. Apply layer of sheet membrane underlayment extending minimum 18" from penetrations; start at bottom and weatherlap joints; apply over metal flashing to direct water to exterior.
 - 4. Weatherlap items projecting through underlayment and seal weathertight.

END OF SECTION

SECTION 07530 - ELASTOMERIC MEMBRANE ROOFING

PART 1 - GENERAL

- A. Section Includes: Provide fully bonded reinforced thermoplastic polyolefin (TPO) sheet roof membrane system with base flashing, roof insulation, and accessories as required for complete, weather-tight installation.
- B. Reference Standards: National Roofing Contractors Association, The NRCA Roofing and Waterproofing Manual, Fourth or Fifth Edition.
- C. Performance Requirements: Conform to applicable code requirements and Underwriters Laboratory (UL) for Class A roof system.
 - 1. Wind Resistance: Provide system certified by manufacturer to be capable of withstanding wind pressures comparable to UL approved wind resistance Class 60 classification.
- D. Submittals: Furnish membrane manufacturer's literature for membrane and base flashing materials and furnish samples of each exposed material.
- E. Materials Certification: Submit manufacturer certification materials and components conform to Specifications and are compatible with each other, roof substrate, and related work.
- F. Manufacturer Representative Certification: Submit certification by manufacturer's representative indicating work has been installed in accordance with manufacturer's recommendations and installation instructions.
- G. Qualification of Installers: Company with minimum five years successful experienced in TPO membrane roof application on projects of similar scope. Roofing and insulation manufacturer certified or approved.
- H. Pre-Installation Conference: Convene prior to commencing roofing work; require attendance of parties directly affecting roofing work. Review procedures and coordination required with related work.
- I. Special Project Warranty: Provide for correcting failure of roofing system to resist penetration of water and damage from wind; repair roofing and pay for or replace damaged materials and surfaces; Special Project Warranty period two years.

PART 2 - PRODUCTS

- A. Manufacturers: Firestone Building Products Co.; GenFlex Roofing Systems Division GenCorp.; GAF Building Materials Corp.
- B. Roof Membrane: ASTM D6878, Thermoplastic Polyolefin (TPO) membrane, type and thickness as recommended by roof membrane manufacturer for application involved, but no less than 60 mils.
 - 1. Provide special coating as recommended by membrane manufacturer at areas where membrane may be exposed.
- C. Accessories: Provide as recommended by membrane manufacturer and system manufacturer as required for complete weathertight installation:
- D. Roof Protection Pads: Provide protection materials as recommended by membrane manufacturer where traffic is anticipated over membrane; secure pads in place.

PART 3 - EXECUTION

- A. Preparation: Verify deck is dry, clean and smooth, free of depressions, waves and projections detrimental to roofing membrane, and properly sloped for drainage. Beginning installation indicates acceptance of substrate.
- B. Installation: Install membrane roofing system in accordance with manufacturer's recommendations and instructions and as required to meet requirements for warranty and applicable codes.
 - 1. Comply with NRCA Specification Guide for Thermoset Roof Membranes as applicable; where conflicts exist comply with manufacturer's recommendations.
- C. Roof Membrane: Apply membrane in accordance with membrane manufacturer's recommendations and installation instruction.
 - 1. Apply sheet membrane smooth, free from air pockets, wrinkles, fishmouths, unlappped joints, or tears, over first layer insulation.
 - 2. Coordinate installation of roof drains and related flashings.

3. Seal flashings and items projecting through membrane; seal terminations with additional layer of membrane and mastic.
4. Apply special membrane or coating of membrane, as recommended by membrane manufacturer, at areas where membrane may be exposed to sunlight.
- D. Roof Protection Pads: Place in accordance with membrane manufacturer recommendations and as required to ensure protection of membrane from traffic over roof.
- E. Manufacturer's Field Services: Manufacturer's representative shall inspect work of Project on regular basis and provide certification roofing system has been installed in accordance with manufacturer's recommendations.
 1. Provide unobstructed access to roofing work.
 2. Correct defects and irregularities as advised by manufacturer's representative.

END OF SECTION

SECTION 07600 - FLASHING AND SHEET METAL

PART 1 - GENERAL

- A. Summary: Provide galvanized steel flashing and sheet metal including accessories for complete weathertight installation, including integral concealed sealants.
 - 1. Break formed aluminum ornamental metal shapes including fascias at windows are in Section 05700; concealed sheet metal at building envelope underlayment is in Section 07265.
- B. System: Allow for movement of components without causing buckling, failure of joint seals, undue stress on fasteners or other detrimental effects, when subject to 100 year seasonal temperature ranges.
- C. Standards: Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Architectural Sheet Metal Manual, Fifth Edition.
- D. Submittals: Furnish product data for manufactured products.
- E. Warranty: Correct failure of metal flashing system to resist penetration of water and damage from wind; warranty period two years.

PART 2 - PRODUCTS

- A. Flashings and Sheet Metal: ASTM A924 and A653 G90 galvanized steel sheet; minimum 24 gage, heavier gage where recommended by SMACNA Manual; mill phosphatize where indicated to be field painted.
 - 1. Accessories: Provide as required for complete system complying with SMACNA Manual.
- B. Manufactured Reglets: Fry/Springlok or MM Systems/Snap-Tite, for two piece flashing; metal to match flashing and sheet metal.
- C. Parapet Scupper Sleeves: Josam/Series 25000.
- D. Downspout Nozzles: Josam/Series 25010.
- E. Roof Drains: Josam/Series 25500 Series as indicated and as required for specific applications.
- F. Solder and Fasteners: As recommended by SMACNA and complying with applicable codes and regulations; hot dipped galvanized minimum coating comparable to G90.
- G. Concealed Sealant: Butyl type for use in conjunction with sheet metal; non-staining; non-corrosive; non-shrinking and non-sagging; ultra-violet and ozone resistant for exterior concealed applications.
- H. Bituminous Paint: Acid and alkali resistant type; black color; asbestos free.
- I. Fabrication: Comply with SMACNA Manual; form sections square, true and accurate to size, free from distortion and other defects detrimental to appearance or performance.
 - 1. Hem exposed edges on underside 1/2".
- J. Backpaint flashings with heavy bodied bituminous paint where in contact with cementitious materials or dissimilar metals.

PART 3 - EXECUTION

- A. Install metal flashing and sheet metal in accordance with SMACNA Architectural Sheet Metal Manual; tight in place, with corners square, surfaces true and straight in planes, and lines accurate to profiles as indicated on Drawings.
 - 1. Install manufactured products in accordance with manufacturer recommendations and installation instructions.
- B. Install sealants where required to prevent direct weather penetration.
- C. Completed installation shall be free of rattles, noise due to thermal and air movement, and wind whistles.

END OF SECTION

SECTION 07840 - FIRESTOPPING

PART 1 - GENERAL

- A. Work Included: Provide firestopping as required to maintain effective barrier against spread of flame, smoke and gases, and to retain integrity of time-rated construction as indicated and at following types of locations.
 - 1. Provide at penetrations through construction separating garage and house, and as required by applicable codes.
- B. Firestopping: Comply with California Building Code, Chapter 7 requirements for firestopping, including both F Ratings and T Ratings as applicable for separating garage from residence.
- C. Submittals: Furnish shop drawings, product data, and certificates of compliance with Contract Documents and applicable codes.

PART 2 - PRODUCTS

- A. Manufacturers: 3M/3M Fire Barrier; Specified Technologies, Inc. (STI)/SpecSeal and Pensil Firestopping; Hevi-Duty Nelson/Firestop Products; or Hilti/Hilti Firestop.
- B. General: Choose products and methods meeting applicable codes and Specification requirements for each firestopping application, subject to Architect's acceptance.
- C. Firestopping Materials: Furnish materials for penetrations in time-rated floor, wall, and partition assemblies capable of preventing passage of flame, smoke, and hot gases.
 - 1. Penetration Test: Furnish materials passing ASTM E814 for penetration fire stopping indicating maintenance of time-rated adjacent assemblies.
 - a. Additional Tests: Where required by applicable authorities, provide materials passing ASTM E119 time-temperature fire conditions for fire ratings indicated for assemblies.
 - 2. Flame Spread: ASTM E84 flame spread rating of 25 or less.
- D. Firestopping: Maintain fire rating of assembly in which firestopping is installed, such as floor, partition, or wall, in accordance with ASTM E119 tests.

PART 3 - EXECUTION

- A. Inspection: Examine surfaces and conditions receiving or affecting the work. Do not proceed until unsuitable conditions are corrected.
- B. Installation: Install firestopping in accordance with manufacturer's literature and installation instructions and recommendations.
- C. Field Inspections: Maintain copy of manufacturer's installation instructions and recommendations at each work area.

END OF SECTION

SECTION 07900 - JOINT SEALERS

PART 1 - GENERAL

- A. Summary: Provide joint sealers, for interior and exterior joints not specified elsewhere, with backing rods and accessories as required for complete installation; joint sealers include sealants and calking as indicated.
 - 1. Flashing and sheet metal concealed sealants are in Section 07600, and acoustical sealants are in Section 09260.
- B. Installer Qualifications: Firm with minimum five years successful experience on projects of similar type and size, using specified products.
- C. Submittals: Furnish product data and samples of exposed joint sealers in required colors.
- D. Warranty: Repair or replace joint sealers which fail to perform as intended, because of leaking, crumbling, hardening, shrinkage, bleeding, sagging, staining and loss of adhesion; warranty period two years.

PART 2 - PRODUCTS

- A. Single Component Low Modulus Silicone Sealant: ASTM C920 Type S, Class 25, Grade NS; minimum 50% expansion and compaction capability.
 - 1. Manufacturers: GE/Silpruf, Silglaz or GESIL; Dow/790 or 795; Pecora/864.
 - 2. Provide at exterior locations not exposed to traffic.
- B. Multi-Component Polyurethane Sealant: ASTM C920, Type M, Grade P, Class 25, self-leveling; minimum 25% expansion and compaction capability.
 - 1. Manufacturers: Mameco/Vulkem 245; Pecora/NR-200 Urexpan.
 - 2. Provide at traffic bearing locations.
- C. Mildew-Resistant Silicone Rubber Sealant: ASTM C920, Type S, Grade NS, Class 25, compounded with fungicide, specifically for mildew resistance.
 - 1. Manufacturers: GE/SCS 1702; Dow/786; Pecora/863.
 - 2. Provide at interior joints in wet areas.
- D. Acrylic-Emulsion Sealant: ASTM C834 acrylic or latex-rubber-modified acrylic sealant, permanently flexible, nonstaining and nonbleeding.
 - 1. Manufacturers: Pecora/AC-20 or Sonneborn/Sonolac.
 - 2. Provide at general interior applications.
- E. Accessories: Non-staining types recommended by joint sealer manufacturer for joint surfaces to be primed or sealed.
- F. Colors: As indicated or as selected by Architect from manufacturer's full range of colors.

PART 3 - EXECUTION

- A. Preparation: Prepare joint surfaces in accordance with ASTM C1193 and as recommended by joint sealer manufacturer.
- B. Installation: Comply with manufacturer's printed instructions and ASTM C1193, except where more stringent requirements are shown or specified.

END OF SECTION

SECTION 08210 - WOOD DOORS

PART 1 - GENERAL

- A. Summary: Provide exterior wood doors and interior flush wood doors.
- B. Standards: Comply with Architectural Woodwork Standards, Edition 1, 2009 (AWS).
- C. Submittals: Submit manufacturer's literature, shop drawings for vertical board wood doors, and door veneer samples.
- D. Warranty: Provide for replacing, rehanging and refinishing wood doors exhibiting defects in materials or workmanship including warp and delamination; warranty period two years.

PART 2 - PRODUCTS

- A. Entry Door: Premium quality custom wood door as indicated on Drawings with Mahogany Cedar veneers as approved by Architect; Type I Bond for exterior doors; comply with Woodwork Institute Standards for custom wood doors.
- B. Solid Core Flush Wood Doors: Provide solid wood framed glued block or particleboard core five ply construction; Type I Bond for exterior doors, Type II Bond for interior doors; 2-1/4" thick for exterior doors, 1-3/4" thick for interior doors.
 - 1. Manufacturers: Algoma Hardwoods, Inc.; Eggers Industries Architectural Door Division; Marshfield Door Systems, Inc.; VT Industries.
 - 2. Exterior Transparent Finished Face Veneers: Premium Grade Western Red Cedar veneers to match wood siding in Section 07460; minimum 1/30" (0.033" thick) before sanding.
 - 3. Interior Transparent Finished Face Veneers: Premium Grade veneers as indicated on Product Schedules; minimum 1/30" (0.033" thick) before sanding.
 - 4. Opaque Painted Door Veneers: Premium Grade White Birch veneers; minimum 1/30" (0.033" thick) before sanding.
 - 5. Fire Rated Doors: Labeled; UL or Warnock Hersey rated; refer to Drawings for fire rating requirements. Use wood core construction, mineral core not permitted.
- C. Adhesives: Provide Type I adhesives for wood doors with exterior exposure, Type II adhesives for interior wood doors.
- D. Fabrication: Prefit wood doors; prepare doors to receive hardware, refer to Section 08700 for hardware requirements and templates; factory machine doors for mortise hardware.
 - 1. Prime Painting: Comply with requirements specified in Section 09900.

PART 3 - EXECUTION

- A. Installation: Install wood doors in accordance with manufacturer's recommendations and installation instructions, and reference standards, plumb and square, and with maximum diagonal distortion of 1/16".
 - 1. Install fire rated wood doors in accordance with requirements for specified fire label and requirements of NFPA 80.

END OF SECTION

SECTION 08360 - SECTIONAL OVERHEAD DOORS

PART 1 - GENERAL

- A. Summary: Provide aluminum and glass sectional overhead doors with frames, sections, brackets, guides, tracks, counterbalance mechanisms, hardware, operators and accessories as required for complete operational installation.
- B. Wind Loads: Design and reinforce doors to withstand minimum 20 psf wind loads.
- C. Submittals: Furnish product data, and frame samples.

PART 2 - PRODUCTS

- A. Manufacturers: Clopay Corporation or similar.
- B. Door Sections: Manufacturer's standard 2-1/8" thick aluminum frame.
 - 1. Type: Clopay/Model Avante or similar.
 - 2. Frame: Aluminum.
 - 3. Glass: Frosted.
 - 4. Seals: Each door section to have weathertight rabbetted joints.
 - 5. Finish: Match with finish specified under Section 09900 – Paints and Coatings.
- C. Track: Minimum 16 gage galvanized track as recommended by manufacturer for door size; bracket mounted or continuous angle mounted and fully adjustable for sealing door to jamb; reinforce horizontal track.
- D. Hardware: Hinges and brackets made from galvanized steel; track rollers hardened steel balls of size suited to size of track.
- E. Spring Counterbalance: Heavy duty oil tempered wire torsion springs on continuous ball bearing cross header shaft; galvanized aircraft type lifting cables.
- F. Weatherstripping: Provide manufacturer's standard floor seals, header seals, and jamb seals.
- G. Electric Door Operator: Furnish electric door operator assembly of size and capacity recommended and provided by door manufacturer; not less than 3/4 HP motor; system shall be free of operational noise and shall have acoustical isolation mounts.
 - 1. Provide complete with electric motor and factory-prewired motor controls, gear reduction unit, solenoid operated brake, clutch, remote control stations and control devices.
 - 2. Provide hand-operated disconnect or mechanism for automatically engaging sprocket chain operator and releasing brake for emergency manual operation.
 - 3. Controls: Provide interference-free radio remote control system, exterior combination lock surface mounted with cover, and interior button control station with push button controls labeled "open", "close" and "stop".
 - a. Provide electric eye located 18" above garage floor to prevent garage door from closing when object is in path of door track.
 - 4. Provide integral light fixture with garage door operator, not less than two lamps, and provide motion detector to keep lights on and to turn on lights when someone enters garage from house.

PART 3 - EXECUTION

- A. Installation: Install sectional door in accordance with manufacturer's instructions.
 - 1. Install door, track and operating equipment complete with necessary hardware, jamb and head mold stops, anchors, inserts, hangers and equipment supports.
 - 2. Provide sway bracing, diagonal bracing and reinforcing as required for rigid installation of track and door operating equipment.

END OF SECTION

SECTION 08520 - ALUMINUM WINDOWS AND DOORS

PART 1 - GENERAL

- A. Summary: Provide aluminum windows and doors, with integral glazing, flashing, and accessories as required for complete weather tight installation.
 - 1. Metal framed skylights are in Section 08630.
- B. Standards: American Architectural Manufacturers Association/National Wood Window and Door Association, AAMA/NWWDA 101/I.S.2: Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors and Glass Association of North America (GANA): Glazing Manual.
- C. Design Criteria: Provide units capable of withstanding wind and seismic loads as required by applicable codes.
- D. Submittals: Submit product data, shop drawings, and samples of metal finish, glass, and exposed glazing materials.

PART 2 - PRODUCTS

- A. Manufacturers: Fleetwood Windows and Doors.
- B. Aluminum Windows and Doors: Comply with AAMA 101 Commercial Grade or better with Performance Class as required to comply with applicable code wind loads.
 - 1. Type: Fleetwood/Westwood 250 for awning/casement windows, Kona 3800 for window wall, and Norwood 3050 for sliding doors.
 - 2. Finish: Clear anodized finish as approved by Architect.
- C. Insulated Glass: ASTM E774, Class A, preassembled units consisting of organically sealed panes of glass enclosing a hermetically sealed dehydrated air space with -20 degree F dew point; standard dual seal system; total unit thickness 1".
 - 1. Glass: ASTM C1036, select glazing quality clear float glass.
 - 2. Safety Glass: ASTM C1048, Kind FT, fully tempered select glazing quality glass complying with Building Code and passing ANSI Z97.1, safety glazing.
 - 3. Low Emissivity Coating: Provide PPG/Solarban 60 type low e coating on No. 2 surface.
 - 4. Translucent Glass: Provide exterior lite as translucent glass where indicated on the drawings.
- D. Glazing Materials: Manufacturer standard type to suit locations and applications.
- E. Miscellaneous Materials: Manufacturer's standard.
- F. Hardware: Manufacturer's standard secure hardware as approved by Architect; fabricated from aluminum, stainless steel, or corrosion resistant material compatible with aluminum; conform to AAMA 101.
- G. Screens: Provide manufacturer's standard screens for windows and conforming with ANSI/SMA 2005; frames finished to match windows.
- H. Fabrication: Fabricate to allow for clearances and shim spacing around perimeter to enable installation; provide for thermal movement and slope and weep sills for drainage.
 - 1. Glass Installation: Conform to in GANA "Glazing Manual"; glass shall not touch metal.

PART 3 - EXECUTION

- A. Installation: Install units in strict compliance with manufacturer's recommendations and installation instructions; assemble and anchor various components to allow for expansion and contraction, maintaining weather tight condition.

END OF SECTION

SECTION 08630 - METAL FRAMED SKYLIGHTS

PART 1 - GENERAL

- A. Summary: Provide metal framed skylight system, with glazing, anchorage, support framing, integral metal flashing, and accessories as required for complete, weathertight installation.
- B. Manufacturer Design Requirements: Design skylight system to be watertight, insure joints, gaps and penetrations are sealed.
- C. Submittals: Furnish shop drawings, product data, and metal and glass samples.
 - 1. Certification: Furnish certification signed by structural engineer registered in California indicating skylight system conforms to Contract Documents and applicable codes.
- D. Special Project Warranty: Provide for correcting failure of skylight system to resist penetration of water and wind; special warranty period two years.

PART 2 - PRODUCTS

- A. Manufacturers: O'Keeffe's Inc., or Royalite Manufacturing.
- B. Skylight System: Structurally reinforced aluminum and glass with support framing, related flashings, anchorage and attachment devices; operable where indicated.
 - 1. Finish: Clear anodized aluminum as approved by Architect.
 - 2. Insulated Glass: Preassembled units consisting of organically sealed panes of glass enclosing a hermetically sealed dehydrated air space with -20 degree F dew point; ASTM E774, Class A; dual seal system including spacers and desiccant; 1" thick.
 - a. Outside Lites: Select glazing quality, tinted float glass, fully tempered, meeting ASTM C1048, Kind FT; nominal thickness 1/4"; safety glass.
 - b. Inside Lites: Two sheets of clear float glass laminated with 60 mil film of polyvinyl buteral; safety glass; laminated layers free of air pockets and foreign substances; total glass thickness nominal 1/4".
 - c. Low E Coating: Provide PPG/Solarban 60 high performance low emissivity coating on Number 2 surface.
- C. Sheet Metal Integral with Skylight: Clear anodized aluminum to match skylight frame and conforming to requirements of Section 07600 - Flashing and Sheet Metal.
- D. Gaskets, Setting Blocks, and Spacers: Neoprene type as recommended by Glass Association of North America (GANA).
- E. Corrosion Isolation: Bitumastic paint of alkali-resistant type with minimum 15-mil dry-film thickness; asbestos free.
- F. Apply coat of bituminous paint on aluminum surfaces in contact with dissimilar materials.
- G. Factory miter and vulcanize exterior glazing gasket corner sections.

PART 3 - EXECUTION

- A. Install skylight system in accordance with manufacturer's instructions and recommendations to achieve weathertight installation; plumb, level and free of warp or twist.
- B. Install glass in accordance with GANA Glazing Manual; do not allow glass to touch metal.

END OF SECTION

SECTION 08700 - HARDWARE

PART 1 - GENERAL

- A. Work Included: Provide hardware for wood doors.
 - 1. Garage door hardware is in Section 08360.
- B. Submittals: Furnish shop drawings, product data including keying schedule, and samples of each required style and finish. Supply templates to door and frame manufacturers for proper and accurate sizing and locations of cut-outs for hardware.
- C. Architectural Hardware Consultant (AHC): Contractor or hardware supplier shall provide services of AHC to prepare detailed hardware groups and to assist Architect and Owner in selection of hardware as required for Project configurations indicated.

PART 2 - PRODUCTS

- A. General: Provide complete hardware with accessories as required for doors and applications indicated and not provided under other sections.
- B. Hinges, Butts, and Pivots: Butt hinges unless otherwise indicated, Deltana 3 ½" x 3 ½" or approved equal, including fire rated hinges.
- C. Locking Devices: Provide of metal matching specified finish; interior parts of steel and zinc-dichromate plating, to resist rusting and corrosion; do not supply plastic, die-cast or aluminum mechanisms; solid lever with rose as selected by Architect.
 - 1. Manufacturers: Schlage; Sargent; Yale; Best; and as approved by architect.
 - 2. Mortise Locksets (Exterior Doors): ANSI A156.13, Series 1000, Grade 1, Mortise Type with 6 pin tumbler cylinders, except where otherwise indicated in Hardware Schedule.
 - 3. Cylindrical Locksets (Bedrooms and Bathrooms): ANSI A156.2, Series 4000, Bored Type (cylindrical) privacy locksets.
 - 4. Cylindrical Latchsets (Other Interior Doors): ANSI A156.2, Series 4000, Bored Type (cylindrical) latchsets.
- D. Cylinders, Keys, and Keying: As directed by Owner.
- E. Closer: LCN or Dorma, ANSI A156.4, furnish products of one manufacturer; full rack and pinion type with steel spring and non-freezing hydraulic fluid.
 - 1. Sizes: Adjustable to comply with applicable code requirements.
- F. Thresholds, Stops, Trim, and Miscellaneous Hardware: Provide as indicated, as specified, as included in Hardware Schedule, and as required for complete installation.
 - 1. Weatherstripping: Provide continuous weatherstripping at top and sides of exterior doors.
 - 2. Fire Gaskets: Provide continuous fire rated gaskets at top and sides of fire rated doors.
- G. Through Bolts: Through bolts and grommet nuts shall be avoided on door faces in highly visible areas, unless no alternative is possible, as directed and approved, and shall not be used for solid wood core doors.
- H. Finishes: Provide following finishes unless otherwise indicated or directed by Owner and Architect.
 - 1. Typical: BHMA 630 (US32D) satin stainless steel.

PART 3 - EXECUTION

- A. Install hardware in accordance with manufacturer's recommendations and installation instructions; fit hardware prior to painting, then remove for painting of doors and frames before final installation of hardware.

END OF SECTION

SECTION 08830 – FRAMELESS MIRRORS

PART 1 - GENERAL

- A. Work Included: Provide frameless mirrors, including special fusion coating for cleanability, with accessories as required for complete installation.
- B. References: Glass Assoc. of North America (GANA), Glazing Manual.
- C. Submittals: Furnish product data and samples of mirror glass and exposed materials.
- D. Special Project Warranties: Replace mirrors which exhibit signs of desilvering or signs of distortion; Special Project Warranty period of two years.

PART 2 - PRODUCTS

- A. Frameless Mirrors: Mirror quality q1 or q2, clear float glass; 1/4" thick; full silver, copper and organic coatings; eased edges; treated and sealed after cutting and finishing.
 - 1. Manufacturers: Guardian; PPG; or Pilkington.
 - 2. Bottom Supports: Stainless steel angles, minimum 0.05" thickness; provide felt pads for setting mirrors on angles; provide concealed fasteners.
 - 3. Fasteners: Concealed type as required for mirror size.
 - 4. Adhesive: Nontoxic type as recommended by mirror manufacturer for job conditions and substrate.

PART 3 - EXECUTION

- A. Preparations: Remove coatings not firmly bonded to substrate.
- B. Installation: Attach mirrors in accordance with mirror manufacturer's recommendations and to provide ventilation to coating; set or trim felt to face of mirror.
 - 1. Comply with GANA Glazing Manual except where specifically recommended otherwise by mirror manufacturer.
 - 2. Do not allow glass to touch metal surfaces.
- C. Cleaning: Do not apply markers to surface of mirrors.
 - 1. Remove nonpermanent labels immediately.
 - 2. Remove and replace mirrors that are broken, chipped, cracked, abraded or damaged during construction period, including natural causes, accidents and vandalism.

END OF SECTION

SECTION 09220 – PORTLAND CEMENT PLASTER

PART 1 - GENERAL

- A. Summary: Provide Portland cement plaster (stucco) with integral color finish, metal lath and accessories as required for complete finished system.
- B. Submittals: Furnish product data, and not less than 24" by 24" samples.
- C. Site Conditions: Take precautionary measures to ensure plaster is not subjected to excessive sun and wind, excessive evaporation, premature dehydration, or cracking.
- D. Cold-Weather Requirements: Do not apply plaster unless minimum ambient temperature of 50 degrees F has been and continues to be maintained for minimum 48 hours prior to application and until plaster is cured.

PART 2 - PRODUCTS

- A. Exterior Components: Zinc where not fully concealed in plaster, hot-dip galvanized finish; ASTM A924 and A653 minimum G90 for 18 gage and lighter formed metal products, ASTM A123 galvanized after fabrication for 16 gage and heavier products.
- B. Lath: Expanded diamond mesh; minimum 2.5 lbs per square yard typical, 3.4 lbs. per square yard ribbed lath at vertical applications, where over solid substrate, provide to hold lath approximately 1/4" from supporting base.
- C. Inside Corner Mesh: Minimum 26 gage steel; perforated or expanded flanges or clips shaped to permit complete embedding in plaster; minimum 2" x 2" size.
- D. Accessories: Provide as indicated, as recommended by referenced standards, and as required for complete installation.
 - 1. Casing Beads and Base Screeds: Minimum 26 gage, square edges at casing beads, drip type base screeds; provide with expanded flanges.
 - 2. Expansion Joints: Two piece slip type joints; commonly referred to as No. 40.
 - 3. Control Joints: One piece metal joint designed to interlock with plaster, Keene/XJ15-3.
 - 4. Aluminum Vent Strips and Channel Screeds: Extruded 6063 alloy, T5 or T6 temper aluminum, minimum 0.05" thick; with manufacturer's standard baked-on finish.
- E. Anchorages: Type and size to suit application.
- F. Portland Cement Plaster: Provide either neat or ready-mixed (where applicable) materials, at Contractor's option, complying with ASTM C926.
- G. Basecoat Materials:
 - 1. Cement: Normal Type 1 or 1A Portland cement, ASTM C150.
 - 2. Hydrated Lime: Special finishing hydrated lime, Type S, ASTM C206.
 - 3. Aggregate: Natural sand, conforming to ASTM C897 or C144.
- H. Brown Coat Water Acrylic Admix: Acrylic latex admix specifically manufactured for use in Portland Cement Plaster (Stucco) applications and which will not detrimentally affect finish.
- I. Crack Resistant Mesh: Provide Dryvit/Ultramash or Senergy/Premus Senermat reinforcing mesh over brown coat prior to application of finish coat for crack resistance.
- J. Finish: Textured 100% Acrylic "E" Finish and ColorPrime W Primer Dryvit Textured acrylic finish system designed specifically for stucco appearance and suitable for use over Portland cement plaster base with related primer and texture to match Architect approved samples.
 - 1. Manufacturer: Dryvit System, Inc. "E" Finish in Sandpebble Fine Texture. Contact: Stephanie Allgood, (510) 429-8877.
 - 2. Color: TBD.
- K. Water: Clean, fresh and free from injurious amounts of oil, acid, alkali, organic matter or other deleterious substances.
- L. Plaster Mix: Provide plaster mixes in accordance with ASTM C926 as appropriate to the substrate indicated and the approved samples; mix materials dry, to uniform color and consistency, before adding water; do not retemper mixes after set begins.

PART 3 - EXECUTION

- A. Preparation: Prior to application ensure mechanical and electrical services behind surfaces to receive cement plaster have been tested and approved.
- B. Installation: Erect furring and lath in accordance with ASTM C1063 and Plaster and Lathing Systems Manual recommendations; true to lines and levels and to provide surface flatness with maximum variation of 1/8" in 10'-0" in any direction.
- C. Fixture Support Framing: Install supplementary framing, blocking and bracing where work is indicated to support fixtures, equipment, services and similar work requiring attachment and support.
- D. Install expansion and control joints so plaster areas do not exceed 120 ft², and with area sides having a maximum one to two ratio, unless otherwise approved by Architect.
- E. Suspension System: Install to heights indicated on Drawings.
- F. Metal Lathing: Apply lath taut, with long dimension perpendicular to supports; secure end laps with tie wire where they occur between supports; lap sides minimum 1-1/2".
- G. Installation of Metal Accessories: Fasten in place true to line and in correct relation to adjacent materials and as required to prevent dislodging and misalignment by subsequent operations.
- H. Portland Cement Plaster: Conform to ASTM C926 and finish manufacturer recommendations; apply cement plaster using three coat system totaling 7/8", with 3/8" scratch coat, 3/8" brown coat, and nominal 1/8" finish.
 - 1. Allow each coat to slowly dry for minimum period of 48 hours; moist cure first base coat (scratch coat) during 48 hour period; allow base coats to cure for minimum 7 days prior to application of finish coat.
 - 2. Apply special crack resistant mesh over brown coat in accordance with mesh manufacturer recommendations for stucco crack resistance.
- I. Finish: Apply in accordance with manufacturer recommendations and as required to provide surfaces with finish to match approved sample panel.

END OF SECTION

SECTION 09260 - GYPSUM BOARD ASSEMBLIES

PART 1 - GENERAL

- A. Summary: Provide gypsum board assemblies, including joint treatment, acoustical accessories, and general accessories as required for complete installation.
 - 1. Acoustical insulation is in Section 07210.
- B. Standards: Perform gypsum board systems work in accordance with recommendations of ASTM C840 unless otherwise specified.
- C. Systems Responsibility: Provide products manufactured by or recommended by manufacturer of gypsum board to maintain single-source responsibility for system.
- D. Openings: Obtain dimensions and locations from other trades and provide openings and enclosures for accessories, specialties, equipment, and ductwork.
- E. Submittals: Submit product data.

PART 2 - PRODUCTS

- A. Manufacturers: USG; Georgia-Pacific; National Gypsum.
- B. Materials: Provide materials in accordance with ASTM C840.
- C. Gypsum Board: ASTM C36, Type X fire rated; comply with ASTM C840; maximum permissible lengths; ends square cut, tapered edges on boards to be finished.
 - 1. Tile Backer Board: Specified in Section 09300 – Tile.
- D. Gypsum Board Accessories: Comply with ASTM C840.
- E. Acoustical Accessories: ASTM C919 acoustical sealant.
 - 1. Resilient Channels: Screw-type resilient channels where indicated and where required to provide required sound transmission and impact isolation classifications.
- F. Reveals: Extruded aluminum special trim pieces in manufacturer's standard or custom shapes to conform to configurations and dimensions indicated.
 - 1. Manufactures: Fry Reglet Corp./Drywall Moldings; MM Systems Corp./Drywall Moldings; Gordon Inc./Final Forms I Drywall Trims.

PART 3 - EXECUTION

- A. Resilient Channels: Install members true to lines and levels to provide surface flatness with maximum variation of 1/8" in 10'-0"; comply with manufacturer's recommendations.
- B. Gypsum Board Installation: Install in accordance with ASTM C840 and manufacturer's recommendations; use screws when fastening gypsum board; comply with Gypsum Association "Levels of Gypsum Board Finish"; provide fire rated systems where indicated.
 - 1. Finish: Provide GA Level 5, sanded smooth skim coat over three coat finishing is required for typical surfaces indicated to be painted; provide flush, smooth surfaces ready for paint finishes unless otherwise indicated.
 - 2. Garage: GA Level 3 is acceptable.
- C. Acoustical Accessories Installation. Comply with manufacturer recommendations as required to achieve STC ratings indicated.

END OF SECTION

SECTION 09300 - TILE

PART 1 - GENERAL

- A. Summary: Provide tile installations with accessories, as required for complete installation.
 - 1. Provide bed set tile at shower floors and deck tile installation, thin set tile at other locations.
- B. Standards: ANSI A108 series installation standards and Tile Council of North America Handbook for Ceramic Tile Installation.
- C. Submittals: Submit product data and samples of each type of tile and grout.

PART 2 - PRODUCTS

- A. Tile Types, Colors, Styles, and Patterns: As indicated on Product Schedule.
 - 1. Manufacturers: As indicated on Product Schedule.
 - 2. Floor Tile: Provide non-slip units with minimum wet and dry value of 0.60 coefficient of friction when tested in accordance with ASTM C1028.
- B. Portland Cement Setting Bed: Portland cement bed conforming to ANSI A108.1 and TCNA recommendations including separator sheet and reinforcing mesh; separator sheet may be deleted where over shower pan liner or waterproof membrane.
- C. Latex Thin Set: Thinset bond coat, latex-cementitious mortar conforming to ANSI A118.4.
- D. Grout: ANSI A118.7, latex-cementitious type, uniform in color, resistant to shrinkage; color to match tile unless otherwise indicated.
- E. Waterproof Membrane (Exterior Decks, Bathrooms, Bathtub Walls): Schluter/Ditri, Laticrete, Bostik, Mer-Kote; manufacturer's standard system designed specifically for application under tile in non-immersed applications.
- F. Cementitious Backer Units: USG/Durock, Glascrete/Wonderboard; ANSI A118.9; approximately 1/2" thick; UL fire rated as required to maintain integrity of fire rated assemblies; Contractor option to use Georgia Pacific/DenShield Type X.
- G. Special Edge Transition: Schluter/Schiene, aluminum or Just Stainles/Angle Trim 20 mm.
- H. Cleaning and Sealing Materials: As recommended by tile and grout manufacturers, such as Bostik Construction Products/Hydroment CeramaSeal.

PART 3 - EXECUTION

- A. Preparation: Do not commence work until surface conditions are within tolerances required for proper installation; apply latex leveling material where necessary to meet required tolerances.
- B. Waterproof Membrane: Install waterproof membrane at tile areas specified in accordance with manufacturer's recommendations; extend membrane minimum 6" up walls.
- C. Cementitious Backer Units: Install units in accordance with ANSI A108.11, manufacturer's recommendations, and as required to provide fire ratings indicated on Drawings.
- D. Special Edge Transition: Comply with manufacturer recommendations, set true to lines and levels necessary to align with tile and adjacent materials.
- E. Tile: Install tile in accordance with referenced ANSI Standards and TCA recommendations for type of substrate and indicated setting method; latex-cement thin set and bond coats required.
 - 1. Place floor tile in setting bed, wall tile in thin set over backer units, in accordance with patterns indicated on Drawings or as directed by Architect; carefully plan tile layouts, ensure pattern is uninterrupted from one surface to the next and through doorways.
 - 2. Seal tile and grout surfaces where recommended by manufacturer for materials and applications involved; comply with manufacturer's recommendations.

END OF SECTION

SECTION 09640 - WOOD FLOORING

PART 1 - GENERAL

- A. Work Included: Provide wood flooring system, with divider strips to adjacent floor finish, vapor retarder, and with accessories as required for complete finished installation, including finish.
- B. Submittals: Furnish samples.

PART 2 - PRODUCTS

- A. Manufacturer: Member of National Oak Flooring Manufacturers Association.
- B. Wood Flooring: Tongue and groove, indicate grade on each piece.
 - 1. Species: As indicated on Product Schedule; comparable to NOFMA Select and Better.
 - 2. Thickness: Nominal 3/4".
 - 3. Sizes: Plank sizes as indicated and as approved by Architect; random lengths unless otherwise indicated.
- C. Subflooring:
 - 1. Vapor Retarder: Not less than 10 mil polyethylene sheet with joints and perimeter taped.
 - 2. Plywood Underlayment: APA C-D Grade, Exterior grade subfloor sheathing, Douglas fir, or western Larch plywood; 1/2" thick, tongue and groove edges, two layers required.
 - 3. Fasteners: As recommended by NOFMA; fasteners shall not penetrate vapor retarder.
- D. Wood Flooring Fasteners: Blind nail strip flooring to subfloor as recommended by NOFMA.
- E. Floor Finish: Polyurethane or modified polyurethane; type as recommended by flooring manufacturer; satin sheen; minimum two coat system over stain and filler.
- F. Subfloor Filler: Premix latex requiring water only to produce cementitious paste.
- G. Divider Strips: Match wood flooring.

PART 3 - EXECUTION

- A. Preparation: Prior to application of vapor retarder clean substrate surface and ensure floor surface is smooth and flat to plus or minus 1/8" per 10'-0". Use latex filler for minor leveling and to eliminate irregularities which may be detrimental to wood strip flooring.
 - 1. Grind substrate where ridges and irregularities provide unsatisfactory substrate.
 - 2. Apply vapor retarder in accordance with NOFMA recommendations.
 - 3. Apply two layers plywood with joints staggered between layers and secure layers together in accordance with NOFMA recommendations.
- B. Installation: Apply wood flooring to prepared subfloor in accordance with NOFMA instructions.
 - 1. Blind nail tongue and groove wood strip flooring in accordance with NOFMA instructions.
 - 2. Provide divider strips at centerline of door openings and where flooring terminates with tile or other floor finishes.
 - 3. Provide maximum 1:12 slope where finished floor surface changes level between wood flooring and adjacent flooring.
 - 4. Provide expansion space at walls and obstructions.
- C. Floor Finish: Sand flooring, remove dust, apply finish materials in three coats in accordance with manufacturer recommendations and application instructions; buff with steel wool to remove irregularities between coats.

END OF SECTION

SECTION 09900 – PAINTS AND COATINGS

PART 1 - GENERAL

- A. Summary: Provide paints and coatings of exposed items and surfaces.
 - 1. Plaster finish is in Section 09220; wood flooring finish is in Section 09640.
- B. Surfaces Not to be Painted: Prefinished items; concealed and inaccessible areas, code-required labels.
- C. Submittals: Furnish product data and samples.
 - 1. Duplicate painted finishes of approved samples on actual wall surfaces and components for approval prior to commencing work.
- D. Delivery: Deliver materials to job site in original, new and unopened packages and containers bearing manufacturer's name and label.

PART 2 - PRODUCTS

- A. Manufacturers: Benjamin Moore; Sikkens; Sherwin-Williams; Dunn-Edwards; ICI Dulux, Messmers.
- B. Material Quality: Provide top line quality commercial grade (professional painter) paints comparable to Benjamin Moore/Aura Paints; materials not bearing manufacturer's identification as a best-grade product shall not be acceptable.
 - 1. Primers: Provide premium grade primers recommended by paint manufacturer for substrates indicated and for finish systems specified.
 - 2. Undercoats and Barrier Coats: Provide undercoat paints produced by same manufacturer as finish coats; use only thinners approved by paint manufacturer, and use only within recommended limits.
 - 3. Finish Coats: Provide finish coats capable of being washed with mild detergent without loss of color, sheen, or pigments.
 - 4. Finish Coat Coordination: Provide finish coats which are compatible with prime paints, undercoats, and barrier coats used.
- C. Colors and Finishes: Prior to commencement of painting work, Architect will furnish color chips for surfaces to be painted.
 - 1. General: In general provide matte sheen at walls, flat sheen at ceilings, eggshell sheen at kitchen and bath walls and ceilings, and semigloss sheens for doors and frames.
- D. Volatile Organic Compounds: Provide materials with minimal volatile organic compounds (VOC); comply with applicable regulations.

PART 3 - EXECUTION

- A. Preparation: Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions and as specified for substrate condition. Remove items in place and not to be painted, or provide protection; after painting reinstall removed items.
- B. Application: Apply paint in accordance with manufacturer's directions; use applicators and techniques best suited for substrate and type of material being applied.
 - 1. Apply additional coats when stains or blemishes show through final coat, until paint is a uniform finish, color and appearance.
 - 2. Finish doors on tops, bottoms and side edges same as faces.
- C. Minimum Coating Thickness: Apply materials at manufacturer's recommended spreading rate, to establish a total dry film thickness as recommended by coating manufacturer.
- D. Prime Coats: Apply to items not previously primed; recoat primed and sealed surfaces where there is evidence of suction spots or unsealed areas in first coat.
- E. Finish Coats: Provide even texture; leave no laps, irregularity in texture, skid marks, or other surface imperfections; exterior wood to have not less than 2.4 mil dry film thickness.
- F. Exterior Work: Provide following paint systems.
 - 1. Metal: Primer and two coats 100% acrylic enamel; semigloss.

2. IPE Deck: one coat of Messmers UV Plus for Hardwood Decks Finish.
 3. Wood Soffits: Two coats Sikkens/Cetol-23 Plus over Sikkens/Cetol – 1 primer; satin sheen; Color: 078 Natural.
 4. Wood Entry Door: One coat Sikkens Cetol SRD 250, matte- finish.
- G. Interior Work: Provide following paint systems.
1. Gypsum Board Systems: Universal primer and two coats interior latex or acrylic latex.
 2. Metal: Primer and two coats 100% acrylic enamel; semigloss.
 3. Opaque Finished Wood: Primer and two coats 100% acrylic enamel; semigloss.
 4. Stained Wood: Filler, stain, sanding sealer, and two coats of acrylic modified urethane; satin rubbed sheen.
 5. Transparent Finished Wood: Filler and two coats acrylic modified urethane rubbing varnish; satin rubbed sheen.
 6. Wood Entry Door: Water-based polyurethane finish.
- H. Sheens: Comply with ASTM D523, reflectance of paint.

END OF SECTION

SECTION 10212 – LINEAR DIFFUSERS AND GRILLES

PART 1 - GENERAL

- A. Summary: Provide metal and wood linear diffusers and grilles (including floor registers), wall and floor applications, with frames, attachment hardware, and accessories as required for complete finished installation.
- B. Submittals: Submit product data.

PART 2 - PRODUCTS

- A. Manufacturers: Titus, Shoemaker.
- B. Metal Diffusers and Grilles: Titus/CT-480 Series, configurations indicated on Drawings.
 - 1. Type: Extruded aluminum; types as indicated on Mechanical Drawings.
- C. Wood Diffusers and Grilles: Shoemaker/Designer Collection – Wood, configurations as indicated on Drawings.
 - 1. Wood: To match selected wood flooring.

PART 3 - EXECUTION

- A. Installation: Install linear diffusers and grilles in accordance with manufacturer recommendations and installation instruction, properly aligned and level.

END OF SECTION

SECTION 10820 - BATH ACCESSORIES

PART 1 - GENERAL

- A. Summary: Provide bath accessories with attachment hardware and rough-in frames as required for complete, operational installation.
 - 1. Frameless mirrors are specified in Section 08830.
- B. Submittals: Submit product data.

PART 2 - PRODUCTS

- A. Accessories: Refer to Section 1210 - Allowances.

PART 3 - EXECUTION

- A. Installation: Install accessories in accordance with manufacturer's printed instructions using fasteners appropriate to substrate.

END OF SECTION

SECTION 10825 - ALL-GLASS SHOWER AND TUB ENCLOSURES

PART 1 - GENERAL

- A. Summary: Provide all-glass type shower and tub enclosures with clip type supports, hardware, and accessories as required for complete installation.
- B. Submittals: Furnish manufacturer's literature and samples.

PART 2 - PRODUCTS

- A. Manufacturers: C.R. Laurence Co., Inc., Duschqueen; Reflections - USA.
- B. All-Glass Shower and Tub Enclosures: Special all-glass products as matching conditions indicated on Drawings.
 - 1. Exposed Metal Finish: Satin stainless steel.
- C. Glass: Clear glazing quality, fully tempered glass conforming to ASTM C1048, Kind FT; manufacturer's standard 3/8" thick safety glass conforming with applicable codes and regulations; manufacturer's standard glazing accessories
 - 1. Glass: Conform to California Building Code and pass ANSI Z97.1 safety glazing test.
- D. Clips and Fasteners: Aluminum, non-magnetic stainless steel or other material compatible with materials and meeting design requirements.
 - 1. Conceal fasteners wherever possible; where exposed, use flat head countersunk fasteners, finished to match aluminum.

PART 3 - EXECUTION

- A. Installation: Install units in accordance with manufacturer's recommendations and installation instructions; assemble and anchor various components to allow for expansion and contraction, maintaining watertight condition at joints.
 - 1. Install work plumb, straight, square, level and in their proper elevation, plane and location, and in proper alignment with other work.
 - 2. Anchor securely in place, separate aluminum and other corrodible metal surfaces from corrosion and electrolytic action with other materials.

END OF SECTION

SECTION 11452 - APPLIANCES

PART 1 - GENERAL

- A. Summary: Provide appliances with options and accessories as required for complete finished installation.
 - 1. Where appliances are indicated as Owner furnished provide accessories as required for complete operational installation and not furnished with appliance.
- B. Certification Labels: Provide appliances which bear appropriate labels as follows:
 - 1. Energy Ratings: Provide energy guide labels with energy cost analysis (annual operating costs) and efficiency information as required by Federal Trade Commission.
 - 2. UL Standards: UL labels required.
 - 3. ANSI Z-21: AGA seal of approval required for units with gas-burning appliances; coordinate type of gas with Division 15.
- C. Submittals: Submit manufacturer's literature for each type of appliance, including data indicating compliance with requirements and color selection.
- D. Delivery, Storage, and Handling: Deliver appliances in manufacturer's undamaged protective containers, after spaces are ready to receive them.

PART 2 - PRODUCTS

- A. Appliances: Provide appliances indicated with accessories as required for complete operational installation.
 - 1. Types: Refer to Appliance Schedule for Contractor provided and Owner furnished appliances.
 - 2. Options: Where appliances scheduled are available with options and options are not specifically mentioned provide best quality options offered with appliance number indicated.
 - 3. Finishes and Colors: Provide finishes and colors indicated, where not specifically indicated provide finishes as selected by Owner and Architect from manufacturer's full line of finishes including stainless steel where available.
- B. Accessories: Provide accessories as required for complete operational installation.

PART 3 - EXECUTION

- A. Installation: Install appliances in accordance with manufacturer's instructions; coordinate with mechanical and electrical trades as necessary for proper service connections.
- B. Adjusting: Ensure operating parts work freely and fit neatly, adjust hardware and moving parts as necessary.

END OF SECTION

SECTION 15300 - FIRE PROTECTION SYSTEM DESIGN/BUILD

PART 1 - GENERAL

- A. Section Includes: Design/Build retrofitted residential fire protection system as required by applicable codes and requirements of local Fire Protection District.
 - 1. Products of combustion (smoke) detectors are in Section 16100.
- B. Design Requirements: Retrofit fire protection system, including underground piping pertaining to fire protection system.
- C. Product Data: Submit manufacturer's literature.
- D. Shop Drawings: Include layout drawing of complete overhead sprinkler system indicating relationship of all other overhead items including ceiling air diffusers, lighting fixtures and beams. Provide drawings and specifications as required for approvals of authorities.
 - 1. Include plot plan indicating location of underground connections, control valves, piping and related items, and showing location of structures within 15 feet of buildings being protected.
 - 2. Include details and sections as required to clearly define and clarify design.
- E. Samples: Submit samples of each type of sprinkler head.
- F. Certificates: Deliver to Architect certificate of approval of Fire Marshal having jurisdiction.
- G. Record Drawings: During progress of work, maintain accurate record of all changes made in fire protection system installation from layout and materials shown on approved shop drawings.
- H. Manuals: Compile and deliver two copies of operation and maintenance manual, include a copy of record drawings in each copy of manual.
- I. Regulatory Requirements: Comply with requirements of applicable codes and regulations.
- J. Protect materials of this section before, during and after installation and to protect work and materials of all other trades. In event of damage, immediately make repairs and replacements necessary.

PART 2 - PRODUCTS

- A. Manufacturers: Grinnel Automatic Sprinkler Company; Globe Automatic Sprinkler Company; Viking Automatic Sprinkler Company.
- B. Quality of Materials: Quality required by agencies having jurisdiction. Piping to be free from rust and shop coated with one coat of rust-inhibitive paint.
- C. Sprinkler Heads: Concealed "drop-down" pendant spray type, unless otherwise indicated.
 - 1. Finishes: Brushed chrome at wood ceilings and soffits, white at gypsum board ceilings and plaster soffits.

PART 3 - EXECUTION

- A. Examination: Examine areas and conditions under which work will be installed. Beginning of installation signifies acceptance of conditions.
- B. Trenching and Backfilling: Perform trenching and backfilling required for this portion of the Work in strict accordance with earthwork provisions.
- C. Installation: Install complete fire protection system in strict accordance with approved shop drawings. Conceal piping in areas having ceilings. In storage and service areas, pipe may be exposed but shall be held to minimum distance below ceiling.
- D. Site Tests: Upon completion of installation, furnish personnel and equipment necessary and test and re-test complete system, making required adjustments and securing approval of Fire Marshal having jurisdiction.

END OF SECTION

SECTION 15400 - PLUMBING SYSTEM DESIGN/BUILD

PART 1 - GENERAL

- A. Summary: Design/Build complete plumbing system in conformance with applicable codes and standards, state and local, and criteria indicated on Drawings.
 - 1. Provide drawings and specifications as required for approvals of authorities.
 - 2. Design system complete as indicated and including, but not necessarily be limited to:
 - a. Cold water distribution, domestic water heating and distribution, vents and wastes.
 - b. Roof drainage, including internal downspouts, and floor drainage.
 - c. Plumbing fixtures and trim.
 - d. Plumbing items needed for complete and proper installation.
- B. Submittals: Submit complete materials list of items proposed to be furnished and installed under this section; product data, "Certificate of Completion of Chlorination", and operation and maintenance manuals.
- C. Qualification of Installers: Use journeyman plumbers and competent supervisors to ensure proper and adequate installation.

PART 2 - PRODUCTS

- A. Soil, Waste and Vents Piping in Building:
 - 1. Except for fixture connections and vents 2-1/2" size or smaller, pipe and fittings shall be compression-type pipe and fittings with neoprene joints.
 - 2. Vent piping 2-1/2" size and smaller shall be Schedule 40 galvanized steel pipe made up with cast iron drainage fittings, except that no galvanized pipe shall be buried in ground.
- B. Soil and Waste, Exterior: From 5'-0" outside building, use extra strength vitrified clay pipe and fittings conforming to standards of Clay Pipe Institute.
- C. Domestic Water Piping: Hot and cold water piping shall be hard-drawn copper tube with wrought or forged copper fittings and silver solder.
- D. Valves: As required for complete system approved by enforcing agencies.
- E. Valve Boxes: Of required depth, with lock type cast iron covers labeled as required.
- F. Pipe Sleeves and Escutcheons: Provide ample clearance for pipe and covering, and chrome plated wall and floor escutcheons over pipe in finished areas.
- G. Hangers and Supports: As required by codes; trapeze hangers may be used where parallel runs of pipe occur; rods on trapeze hangers shall be 1/2" minimum.
- H. Vent Flashing: Provide flashing and counterflashing at each vent through roof.
- I. Shock Absorbers: Provide for plumbing fixtures and as required by code.
- J. Cleanouts: Exposed parts of floor cleanouts in finished areas shall be scoriated nickel bronze, other interior cleanouts shall be polished scoriated bronze; grade cleanouts to be rough scoriated bronze covers.
- K. Isolation: Isolate dissimilar metals; isolate plumbing lines from building to prevent transmission of noises from plumbing.
- L. Floor Drains: Provide floor drains with strainer and trap primer.
- M. Roof Drains: Cast iron types as approved by Architect.
- N. Insulation: Provide as required by applicable codes and as required to prevent freezing and condensation.
- O. Access Plates: Provide access plates of prime coated steel for painted walls, with Allen key locking devices.

- P. Fixtures and Equipment: Provide fixtures and equipment complete with required stops, supplies, backing drain, trim and other items necessary.
 - 1. Fixtures: Refer to Plumbing Fixture Schedule for fixtures.
 - 2. Finishes: As indicated on Plumbing Fixture Schedule or as selected by Architect from manufacturer's standard colors and finishes.
- Q. Other Materials: Other materials not specifically described but required for complete and proper installation of work shall be new, first quality of their respective kinds subject to approval of Architect.
- R. Roof Drain and Overflow Outlet: Thunderbird Roof Drains, 2" diameter copper, threaded hub outlet with 16 oz. copper flashing sleeve and 16 gauge stainless strainer insert.

PART 3 - EXECUTION

- A. Plumbing Lay Out: Lay out plumbing system in careful coordination with drawings, determining proper elevations for components of system and using only minimum number of bends to produce satisfactorily functioning system.
 - 1. Lay out pipes to fall within partition, walls or roof cavities and to not require furring other than as shown on drawings.
- B. Trenching and Backfill: Perform trenching and backfilling required for this portion of Work.
- C. Installation: Comply with applicable codes, regulations, and manufacturer recommendations and installation instructions.
 - 1. Do not cut into or reduce size of any load-carrying member without prior approval of Architect.
 - 2. Cushion traps and bearings to minimize transfer of sound; provide complete isolation of dissimilar metals.
 - 3. Pitch vents for proper drainage, install vent piping with each bend 45 degrees minimum from horizontal wherever structural conditions will permit.
 - 4. Provide air chambers at fixtures; 16" minimum length and same diameter as branch.
 - 5. Conceal piping unless otherwise shown on drawings.
 - 6. Copper: Make joints in copper tubing with 95-5 silver solder, applied in strict accordance with manufacturer's recommendations.
 - 7. Cold Water Piping: Coat cold water piping concealed within walls and ceilings using specified plastic coating to minimum thickness of 1/16" and applying in strict accordance with manufacturer's recommendation.
 - 8. Hot Water Piping: Insulate hot water piping with specified insulation, applying in strict accordance with manufacturer's recommendations and complying with applicable codes.
- D. Pipe Sterilization: Comply with applicable codes and regulations.
- E. Testing: Verify proper operation of entire system.

END OF SECTION

SECTION 15500 – HEATING AND VENTILATING SYSTEMS DESIGN/BUILD

PART 1 - GENERAL

- A. Summary: Design/Build complete heating and ventilating systems as required by applicable codes and standards, state and local, and criteria indicated on Drawings.
- B. Design Requirements: Provide complete heating and ventilating systems, including but not necessarily limited to:
 - 1. Ventilation of kitchen and sanitary facilities.
- C. Shop Drawings: Include layout drawing of systems indicating relationship of other items.
 - 1. Provide drawings and specifications as required for approvals of authorities.
- D. Product Data: Submit manufacturer's literature and list of items proposed to be furnished and installed under this section.
- E. Record Drawings: During progress of work, maintain accurate record of all changes made in systems installation from layout and materials shown on approved shop drawings.
- F. Manuals: Compile and deliver two copies of operation and maintenance manual, include a copy of record drawings in each copy of manual.
- G. Regulatory Requirements: Comply with requirements of applicable codes and regulations.
 - 1. Conform to California Building Code requirements for Energy Conservation.
 - 2. Conform to California Building Code and Americans with Disabilities Act Accessibility Guidelines requirements for access and adaptability for persons with disabilities.

PART 2 - PRODUCTS

- A. Heating and Venting Systems: By manufacturers approved by Architect.
 - 1. Provide each system from one manufacturer to extent possible.
 - 2. Each kind of material shall be from one manufacture.
- B. General: Quality of materials required for this installation shall be quality required by agencies having jurisdiction and as indicated on Drawings and schedules.
- C. Access Doors: Provide as required for access to controls and maintenance.
- D. Sheet Metal Ductwork: Design and fabricate ductwork to prevent noise and vibration; insulate supply ducts; internally seal discharge ductwork with mastic.
- E. ducts may be used in lieu of metal ducts where concealed and not subject to damage.
- F. Provide other materials as required for complete, operable system.

PART 3 - EXECUTION

- A. Installation: Install heating and ventilating systems in accordance with applicable codes and regulations, manufacturer recommendations and installation instructions, and approved shop drawings.
 - 1. Conceal piping and ducts in areas having ceilings.
 - 2. Install exposed items in locations indicated or approved, straight, and in correct relationship to adjacent materials.
 - 3. Identify piping and equipment, including valves and dampers, to permit immediate and positive recognition of components.
- B. Testing and Adjusting: Furnish personnel and equipment to test and balance systems.

END OF SECTION

SECTION 16100 - ELECTRICAL SYSTEM DESIGN/BUILD

PART 1 - GENERAL

- A. Summary: Design/Build complete electrical system in conformance with applicable codes and standards, state and local, and criteria indicated on Drawings.
 - 1. Provide drawings and specifications as required for approvals of authorities.
 - 2. Conform to California Codes.
- B. Design: Complete, as required for a totally operational building.
 - 1. Electrical service and distribution.
 - 2. Electric fixtures and lamps.
 - 3. Hard wired products of combustion detection system with battery backups.
 - 4. Telephone system.
 - 5. Incidental work on Drawings, required by codes, or required for complete system.
- C. Submittals: Submit product data, shop drawings, including layout drawings of completed system indicating relationships of other items, and samples upon request.
- D. Requirements of Regulatory Agencies: Comply with applicable codes and regulations.
 - 1. Codes: National Electrical Code (NEC).
 - 2. Standards on tests by independent agencies whose classifications and requirements have general acceptance as regulatory:
 - a. Underwriters' Laboratories, Inc. (UL).
 - b. Certified Ballast Manufacturers (CBM).
 - c. Electrical Testing Laboratories (ETL).
 - d. National Electrical Manufacturer Assoc. (NEMA).
- E. Warranty: Warrant electrical system to be free of faults and defects.

PART 2 - PRODUCTS

- A. Conduit: Comply with applicable codes and regulations.
 - 1. Ground Floor Slabs: Minimum galvanized heavy wall type.
 - 2. Standard Applications: Minimum galvanized thin wall (EMT).
- B. Wiring: Minimum number 12, TW, unless larger wiring required by code.
 - 1. Insulate and tape splices in accordance with code.
- C. Panels: Factory assembled main distribution panelboards.
 - 1. Mount typewritten directory behind plastic inside each panel door.
 - 2. Show circuit number and complete description of outlets on each circuit.
- D. Switch Plates and Outlet Plates: Types as indicated on Product Schedule.
- E. Duplex Receptacles: 3-pole grounding type, ground-fault type at exterior and wet areas.
- F. Lighting Fixtures and Lamps: As indicated on Drawings and as required to comply with applicable energy efficiency requirements while providing sufficient lumens for applications involved and natural spectrum lighting.
 - 1. Manufacturers: Halo Lighting or Elite Lighting.
 - 2. Downlights: 4" diameter low voltage downlights.
- G. Products of Combustion System (Smoke Detectors): Architectural Devices, LLC/Modern Smoke Detector Model MSD-101-HB; comply with applicable code requirements; provide hard wired system with battery backups.
- H. Telephone System: Provide minimum four line service to all telephone outlets plus additional wiring as required for other systems.
 - 1. DSL Service: Provide for DSL service as approved by Owner.

- I. Cable Television System: Provide for complete wired cable television as approved by Owner.

PART 3 - EXECUTION

- A. Trenching and Backfilling: Perform trenching and backfilling required for electrical work in strict accordance with earthwork provisions.
- B. Electrical Installation: Wired with white wire for neutral and colored wire for phase wires.
 - 1. Where conduit is installed in concrete slabs, on ground, underground or exposed to weather, make joints liquid tight and gas tight.
 - 2. Bury underground conduit to minimum depth of 2 feet below finished grade, unless otherwise approved.
 - 3. Unless specifically approved by code authorities, install cables and wires in conduit, metal raceways or pullboxes.
- C. Ground electrical system, including housing of fixtures.
- D. Electrical Equipment: Complete with holders, screws, sockets, wires, lamps, as necessary for complete installation.
 - 1. Install electrical equipment, including light fixtures, straight and true with reference to adjacent walls and surfaces.
 - 2. Install lighting fixtures directly to building structure with code approved fastening systems and including required seismic bracing.
 - 3. Provide conduit and wiring for work of other trades as specified in other specification sections.
 - 4. Install and support electrical equipment in accordance with manufacturer's recommendations.
- E. Testing: Upon completion of installation, furnish personnel and equipment necessary and test and re-test complete system, and securing approval of applicable code authorities.
 - 1. Test circuits for proper neutral connections.
 - 2. Measure minimum and maximum voltages.
 - 3. Test for proper grounding.

END OF SECTION

APPENDIX A – PRODUCT SCHEDULE

A PRODUCT SCHEDULE IS PENDING.

SEE DRAWINGS FOR ADDITIONAL INFORMATION AND LAYOUT.

APPENDIX B – APPLIANCE SCHEDULE

AN APPLIANCE SCHEDULE IS ATTACHED. SELECTIONS ARE PENDING.

SEE DRAWINGS FOR ADDITIONAL INFORMATION AND LAYOUT.

Appendix B- APPLIANCE SCHEDULE

Item	Size	Manufacturer	Model #	Finish	Reference Price
(E) KITCHEN					
Side-by-side Refrigerator/					
Freezer	36" w x 24" d	<Manuf>	To be selected	<finish>	\$0.00
Built-in Oven	30" w	<Manuf>	To be selected	<finish>	\$0.00
Built-in Oven	30" w	<Manuf>	To be selected	<finish>	\$0.00
Microwave Oven	30" w	<Manuf>	To be selected	<finish>	\$0.00
Induction Cooktop	36" w	<Manuf>	To be selected	<finish>	\$0.00
Downdraft Hood	36" w	<Manuf>	To be selected	<finish>	\$0.00
Dishwasher	24" w	<Manuf>	To be selected	<finish>	\$0.00
LAUNDRY					
Washer	27" w x 34" d (max.)	<Manuf>	To be selected	<finish>	\$0.00
Dryer	27" w x 34" d (max.)	<Manuf>	To be selected	<finish>	\$0.00
(E) LIBRARY					
Gas Fireplace					
Insert	<edit>	<Manuf>	To be selected	<finish>	\$0.00

APPENDIX C – PLUMBING FIXTURE SCHEDULE

A PLUMBING SCHEDULE IS ATTACHED. SELECTIONS ARE PENDING.

SEE DRAWINGS FOR ADDITIONAL INFORMATION AND LAYOUT.

Appendix C - PLUMBING FIXTURE SCHEDULE

Room	Item	Manufacturer	Model #	Finish / Color	Notes
(E) Bathroom	Sink	<Manuf>	To be selected	<edit>	
	Faucet	<Manuf>	To be selected	<edit>	
	Toilet	<Manuf>	To be selected		
	Tub	<Manuf>	To be selected	<edit>	
	Tub Filler Set	<Manuf>	To be selected	<edit>	
	Shower Hose	<Manuf>	To be selected	<edit>	
	Shower Volume Control	<Manuf>	To be selected	<edit>	
(E) M. Bathroom	Shower				
	Thermostatic Mixture	<Manuf>	To be selected	<edit>	
	Sink	<Manuf>	To be selected	<edit>	
	Faucet	<Manuf>	To be selected	<edit>	
	Toilet	<Manuf>	To be selected	<edit>	
	Tub	<Manuf>	To be selected	<edit>	
	Tub Filler Set	<Manuf>	To be selected	<edit>	
	Handshower	<Manuf>	To be selected	<edit>	
	Shower Bar	<Manuf>	To be selected	<edit>	
	Shower				
	Thermostatic Mixture	<Manuf>	To be selected	<edit>	
	Shower Volume Control	<Manuf>	To be selected	<edit>	

Appendix C - PLUMBING FIXTURE SCHEDULE					
Room	Item	Manufacturer	Model #	Finish / Color	Notes
(E) Kitchen	Sink	<Manuf>	To be selected	<edit>	
	Faucet	<Manuf>	To be selected	<edit>	
	Garbage Disposal	<Manuf>	To be selected	<edit>	
	Sink	<Manuf>	To be selected	<edit>	
	Faucet	<Manuf>	To be selected	<edit>	
Laundry	Sink	<Manuf>	To be selected	<edit>	
	Faucet	<Manuf>	To be selected	<edit>	
Powder 2	Sink	<Manuf>	To be selected	<edit>	
	Faucet	<Manuf>	To be selected	<edit>	
	Toilet	<Manuf>	To be selected	<edit>	

APPENDIX D – ELECTRICAL SCHEDULE

AN ELECTRICAL SCHEDULE IS PENDING.

SEE DRAWINGS FOR ADDITIONAL INFORMATION AND LAYOUT.

APPENDIX E – TABLE OF SUBMITTALS

A TABLE OF SUBMITTALS IS INCLUDED.

APPENDIX E - TABLE OF SUBMITTALS

Section	Shop Drawings	Product Data	Certification	Color and/or Samples	Warranty over 1 yr.	Mock-ups	Other
05500 Metal Fabrications	x	x					
05700 Ornamental Metals	x	x		x			
06200 Finish Carpentry		x	x	x			
06400 Architectural Woodwork	x	x	x	x			
07210 Building Insulation		x					
07265 Building Envelope Underlayment		x		x	x		x
07530 Elastomeric Membrane Roofing		x	x	x	x		x
07600 Flashing and Sheet Metal		x			x		
07840 Firestopping	x	x	x				
07900 Joint Sealers		x		x	x		
08210 Wood Doors	x	x		x	x		
08360 Sectional Overhead Doors		x		x			
08520 Aluminum Windows and Doors	x	x		x			
08630 Metal Framed Skylights	x	x		x	x		
08700 Hardware	x	x		x			x
08830 Frameless Mirrors		x		x	x		
09220 Portland Cement Plaster		x		x			
09260 Gypsum Board Assemblies		x					
09300 Tile		x		x			
09640 Wood Flooring				x			
09900 Paints and Coatings		x		x			
10212 Linear Diffusers and Grilles		x					
10820 Bath Accessories		x					
10825 All-Glass Shower and Tub Enclosures		x		x			
11542 Appliances		x	x				
15300 Fire Protection System Design/Build	x	x	x	x			x
15400 Plumbing System Design/Build	x	x	x				x
15500 Heating and Venting Systems Design/Build	x	x					x
16100 Electrical System Design/Build	x	x		x			x