



May 7th, 2026

PROJECT NAME: NEW OFFICE

ADDRESS: 19 OAK STREET BRENTWOOD CA 94513

APPLICATION NO: 01-122562

ADDENDUM #4

This Addendum forms part of the Contract Documents and modifies the Original Bidding Documents and previous Addenda as noted below. Acknowledge receipt of this Addendum in the space provided in the Bid Form.

DRAWING(S):

ITEM NO. 4.0.

SHEET A6.00 DOOR AND WINDOW SCHEDULES

1. Door “**D1**” revised door thickness to 1 ¾” and “**MATERIAL**” to **HOLLOW METAL**.
2. Door “**D2**” revised door thickness to 1 ¾”
3. Door “ **D6, D7, D8,& D10**” revised door thickness to **1 ¾”** and door **FRAME TYPE** to “**1**”
4. Door “**D4**” **FRAME TYPE** revised to “**1**”
5. **Doore** “**Type E**” (Bathroom door) clarified there is a louver at base of door . See Mechanical drawings for further detail.
6. **DOOR GENERAL NOTES** renumbered notes and also added note #12 “**ALL CORES AND KEYES BY THE DISTRICT**”

ITEM NO. 4.1.

SHEET E3.01.01 PARTIAL POWER & SIGNAL FLOOR PLAN

- 1.) **RE-ISSUE OF CLEAN VERSION FOR CLARITY. SEE **ADDENDUM #1** FOR NARRATIVE OF CHANGES**

SPECIFICATIONS (S):

ITEM NO. 4.1.

ADDED CABINET SPECIFICATION SECTIONS

1. SECTION 06 41 00 ARCHITECTURAL WOOD WORK
2. SECTION 12 36 00 COUNTERTOPS

ATTACHMENTS:

1. SHEET A6.00 SCHEDULES – 1 SHEET,30” X 42”
2. SHEET E3.01.01 PARTIAL POWER & SIGNAL FLOOR PLAN - 1 SHEET 30” X 42”
3. SPECIFICATIONS – ARCHITECTURAL WOODWORK SECTION 06 41 00_8 ½ x 1-8 pages
4. SPECIFICATIONS – ARCHITECTURAL WOOD CASEWORK SECTION 06 41 00 – 8 ½ x 11 - 4 pages

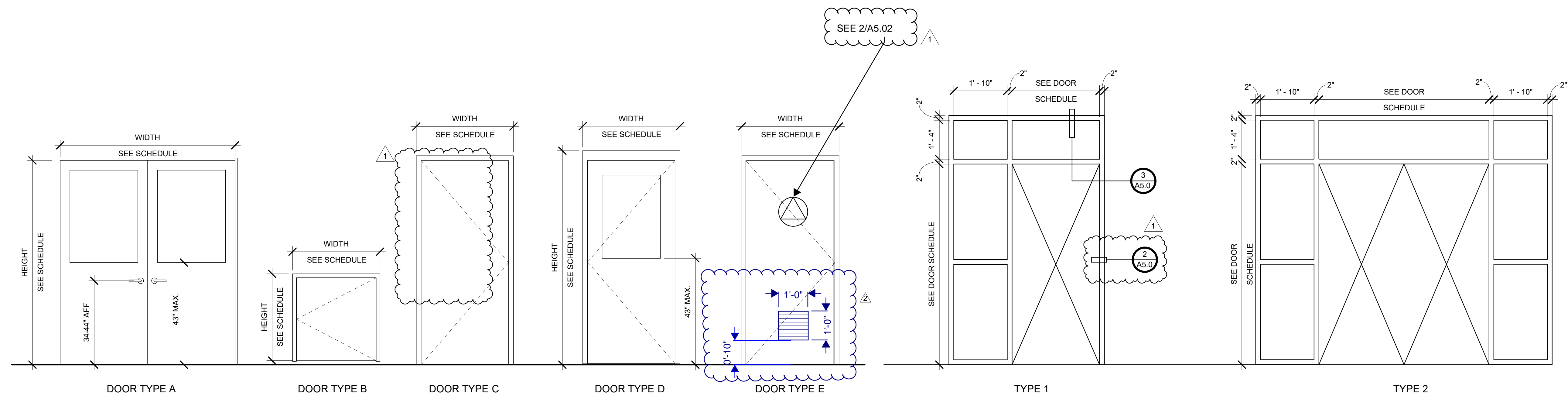
Thank you and please call or email with any further questions.

Rodolfo Chacon, Architect
925-505-8094 cell

Or

Paul Melloni
(925) 634-2166

MARK	DOOR FUNCTION	TYPE MARK	DOOR SIZE		THICKNESS	DOOR		FRAME		DETAILS			HARDWARE SET (SEE SPECS)	FIRE RATING	DOOR PANEL HEIGHT
			HEIGHT	WIDTH		MATERIAL	FINISH	FRAME MATERIAL	FRAME TYPE	FRAME FINISH	HEAD	JAMB			
D1	ENTRY DOOR	A	7'-0"	6'-0"	0'-1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	2	PAINT	5/A5.00	6/A5.00	01	NR	SEE DR. TYPES
D2	INTERIOR DOOR	B	3'-0"	3'-0"	0'-1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	2	PAINT	2/A5.00	2/A5.00	05		
D3	INTERIOR DOOR	D	7'-0"	3'-0"	0'-1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	2/A5.00	2/A5.00	02		
D4	INTERIOR DOOR	C	7'-0"	3'-0"	0'-1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	3/A5.00	2/A5.00	03		
D5	BATHROOM DOOR	E	7'-0"	3'-0"	0'-1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	1	PAINT	3/A5.00	2/A5.00	04		
D6	INTERIOR DOOR	C	7'-0"	3'-0"	0'-1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	1	PAINT	3/A5.00	2/A5.00	03		
D7	INTERIOR DOOR	C	7'-0"	3'-0"	0'-1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	1	PAINT	3/A5.00	2/A5.00	03		
D8	INTERIOR DOOR	C	7'-0"	3'-0"	0'-1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	1	PAINT	3/A5.00	2/A5.00	03		
D9	ENTRY DOOR	D	7'-0"	3'-0"	0'-1 1/4"	HOLLOW METAL	PAINT	HOLLOW METAL	2	PAINT	5/A5.00	6/A5.00	01		
D10	INTERIOR DOOR	C	7'-0"	3'-0"	0'-1 1/4"	HOLLOW METAL	PAINT	HOLLOW METAL	1	PAINT	3/A5.00	2/A5.00	03		
D12	INTERIOR DOOR	C	7'-0"	3'-0"	0'-1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	3/A5.00	2/A5.00	03		

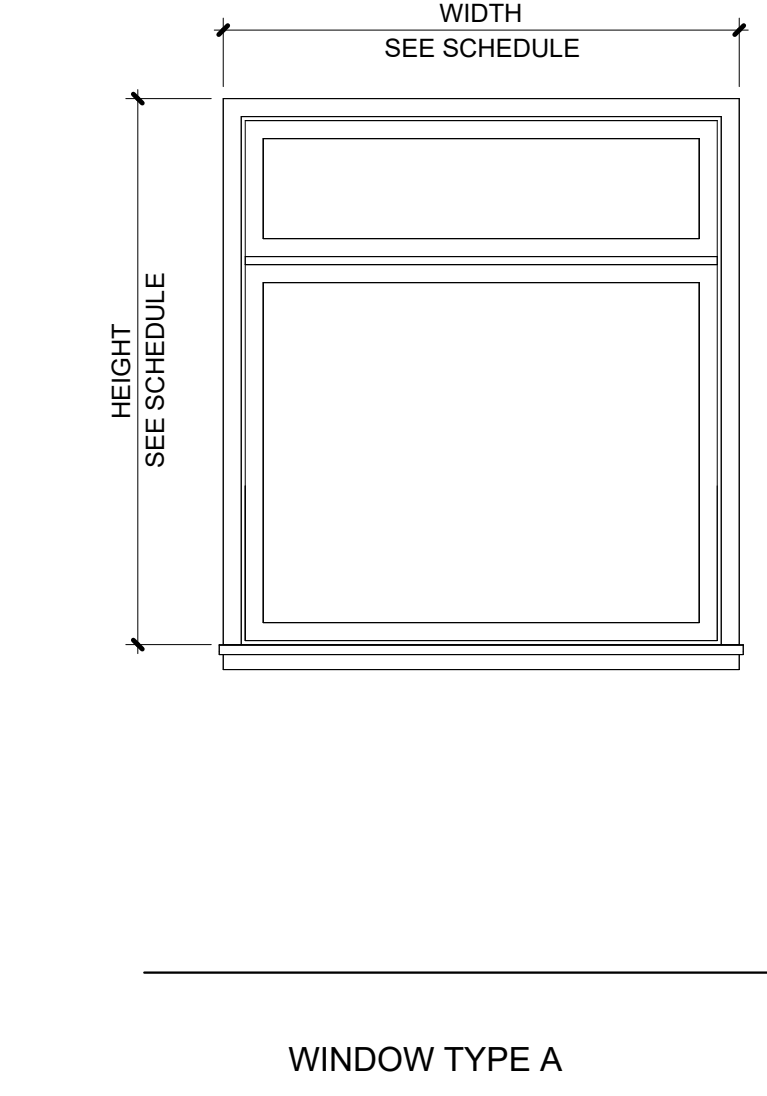
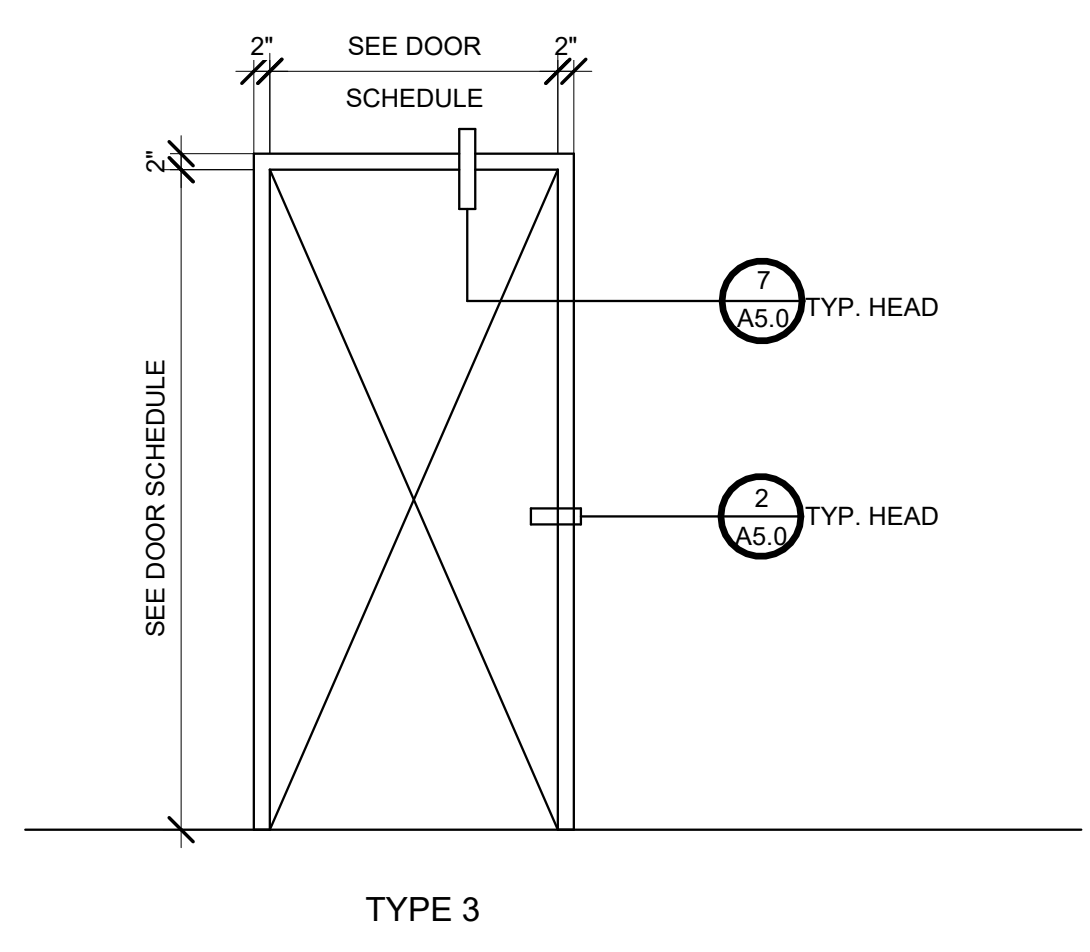
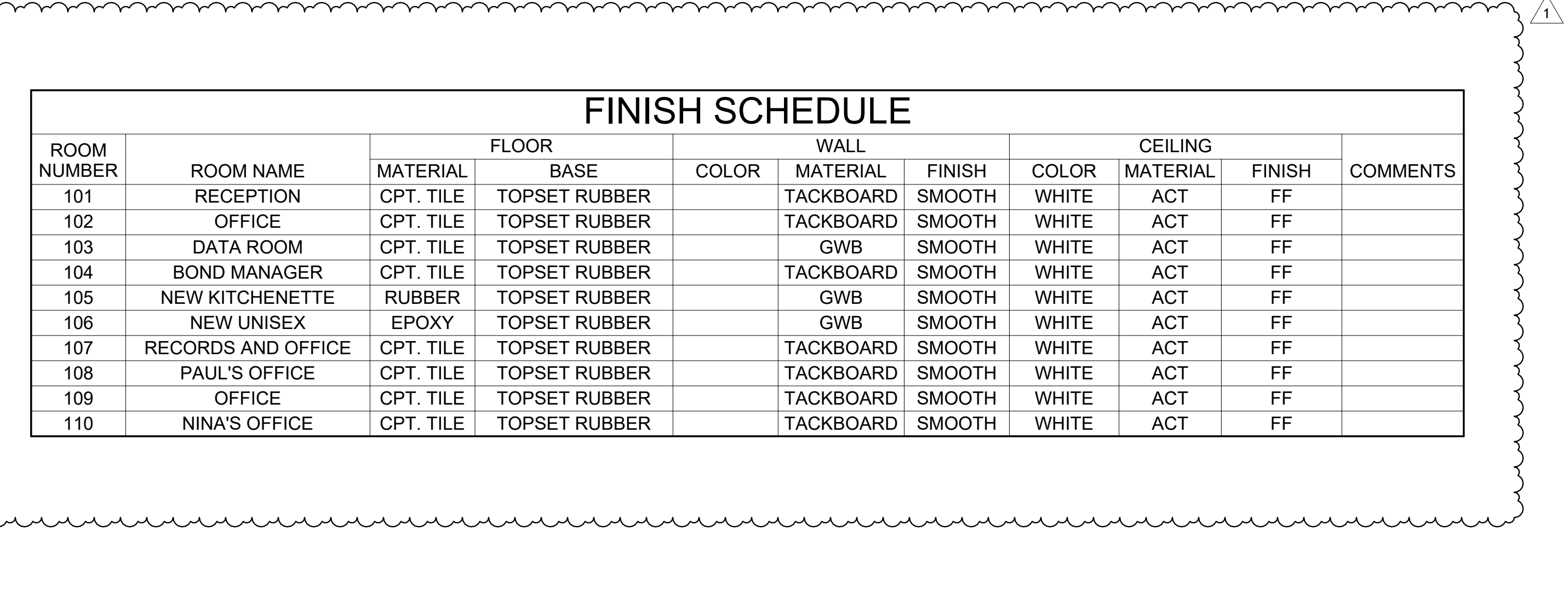


DOOR PANEL TYPES

DOOR FRAME TYPES

WINDOW NUMBER	WINDOW TYPE	WINDOW SIZE		MATERIAL	FINISH	FRAME TYPE	FRAME			COUNT	HARDWARE GROUP	
		WIDTH	HEIGHT				FRAME MATERIAL	FRAME FINISH	HEAD			
W1	A	6'-0"	5'-6"	ALUMINUM	F.F	ALUMINUM	F.F	1/A5.00	1/A5.00 SIM	1/A5.00	1	NEW
W2	A	4'-0"	5'-6"	ALUMINUM	F.F	ALUMINUM	F.F	1/A5.00	1/A5.00 SIM	1/A5.00	5	NEW

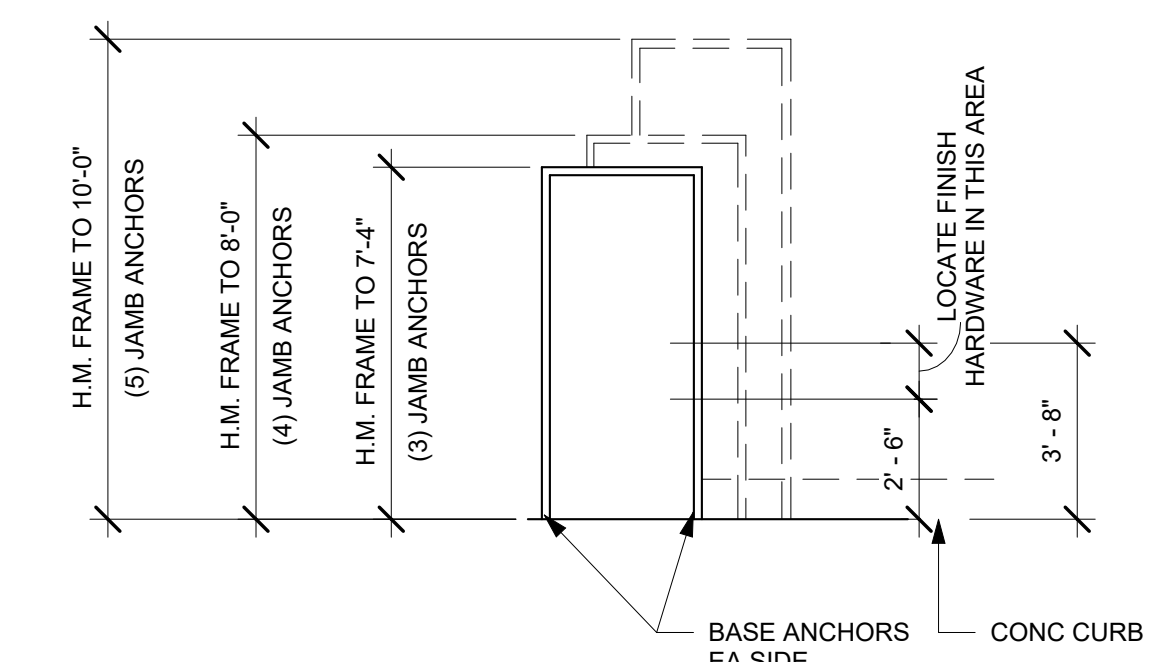
ROOM NUMBER	ROOM NAME	FLOOR		WALL		CEILING		COMMENTS
		MATERIAL	BASE	MATERIAL	FINISH	MATERIAL	FINISH	
101	RECEPTION	CPT. TILE	TOPSET RUBBER	TACKBOARD	SMOOTH	WHITE	ACT	FF
102	OFFICE	CPT. TILE	TOPSET RUBBER	TACKBOARD	SMOOTH	WHITE	ACT	FF
103	DATA ROOM	CPT. TILE	TOPSET RUBBER	GWB	SMOOTH	WHITE	ACT	FF
104	BOND MANAGER	CPT. TILE	TOPSET RUBBER	TACKBOARD	SMOOTH	WHITE	ACT	FF
105	NEW KITCHENETTE	RUBBER	TOPSET RUBBER	GWB	SMOOTH	WHITE	ACT	FF
106	NEW UNISEX	EPOXY	TOPSET RUBBER	GWB	SMOOTH	WHITE	ACT	FF
107	RECORDS AND OFFICE	CPT. TILE	TOPSET RUBBER	TACKBOARD	SMOOTH	WHITE	ACT	FF
108	PAUL'S OFFICE	CPT. TILE	TOPSET RUBBER	TACKBOARD	SMOOTH	WHITE	ACT	FF
109	OFFICE	CPT. TILE	TOPSET RUBBER	TACKBOARD	SMOOTH	WHITE	ACT	FF
110	NINA'S OFFICE	CPT. TILE	TOPSET RUBBER	TACKBOARD	SMOOTH	WHITE	ACT	FF



DOOR GENERAL NOTES

- ALL EXIT DOORS IN SCHOOL BUILDINGS, INCLUDING BUT NOT LIMITED TO DOORS OF TOILET ROOMS AND STORAGE ROOMS SHALL CONFORM TO CBC 1010. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, OR SPECIAL KNOWLEDGE OR EFFORT.
 - EXIT DEVICES (PANIC HARDWARE) SHALL BE INSTALLED IN CONFORMANCE WITH CBC 1010.1.10. THE ACTIVATING MEMBER SHALL BE CENTERED AT A HEIGHT OF NOT LESS THAN 34 INCHES OR MORE THAN 44 INCHES ABOVE THE FLOOR.
 - PANIC HARDWARE IS REQUIRED FROM ROOMS AND CORRIDORS OF E OCCUPANCY WHERE OCCUPANT LOAD EXCEEDS, 50 PER CBC 1010.1.10.
 - DOORS WITH CLOSERS SHALL BE ADJUSTED TO PROVIDE MINIMUM DOOR CLOSER PERIOD OF FIVE SECONDS FROM A POSITION OF 90 DEGREES TO WITHIN 12 DEGREES OF THE DOOR LATCH, MEASURED FROM THE LEADING EDGE OF THE DOOR.
 - MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 POUNDS APPLIED IN THE DIRECTION OF TRAVEL. REQUIRED FIRE DOORS SHALL HAVE A MAXIMUM OPERATING EFFORT NOT TO EXCEED 15 POUNDS. IF APPROVED BY AUTHORITY HAVING JURISDICTION.
 - ALL SIGNAGE AT MAIN ENTRANCES, TOILETS, PERMANENT ROOMS, ASSISTIVE LISTENING SYSTEMS SHALL COMPLY WITH TITLE 24 CBC AND CBC 11B-703.
 - RAISED CHARACTERS SHALL CONFORM TO CBC 11B-703.2 BRAILLE SHALL CONFORM TO 11B-703.3 PICTORIAL SIGNAGE SHALL CONFORM TO 11B-703.6.
 - MOUNTING LOCATION AND HEIGHT: (WHERE PERMANENT IDENTIFICATION IS PROVIDED OR WHERE SIGNAGE IS REQUIRED FOR ROOMS AND SPACES): CBC 11B-703.4.
 - INTERNATIONAL SYMBOL OF ACCESSIBILITY DESIGN AND COLOR SHALL CONFORM TO CBC 11B-703.7.1 & 11B-703.7.2.1.
 - DOORS TO TOILET ROOMS: PROVIDE SIGNAGE CONFORMING TO CBC 11B-703.7.2.6.
 - CONTRAST AND FINISH OF SYMBOLS SHALL CONFORM TO CBC 11B-703.7.1.
- 12. ALL CORES AND KEYS ARE BY THE DISTRICT**

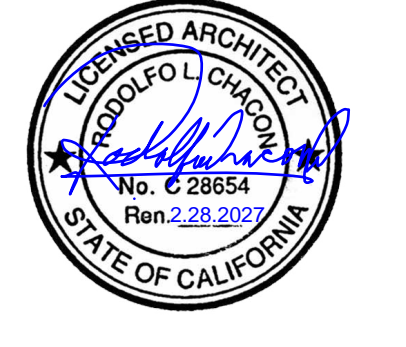
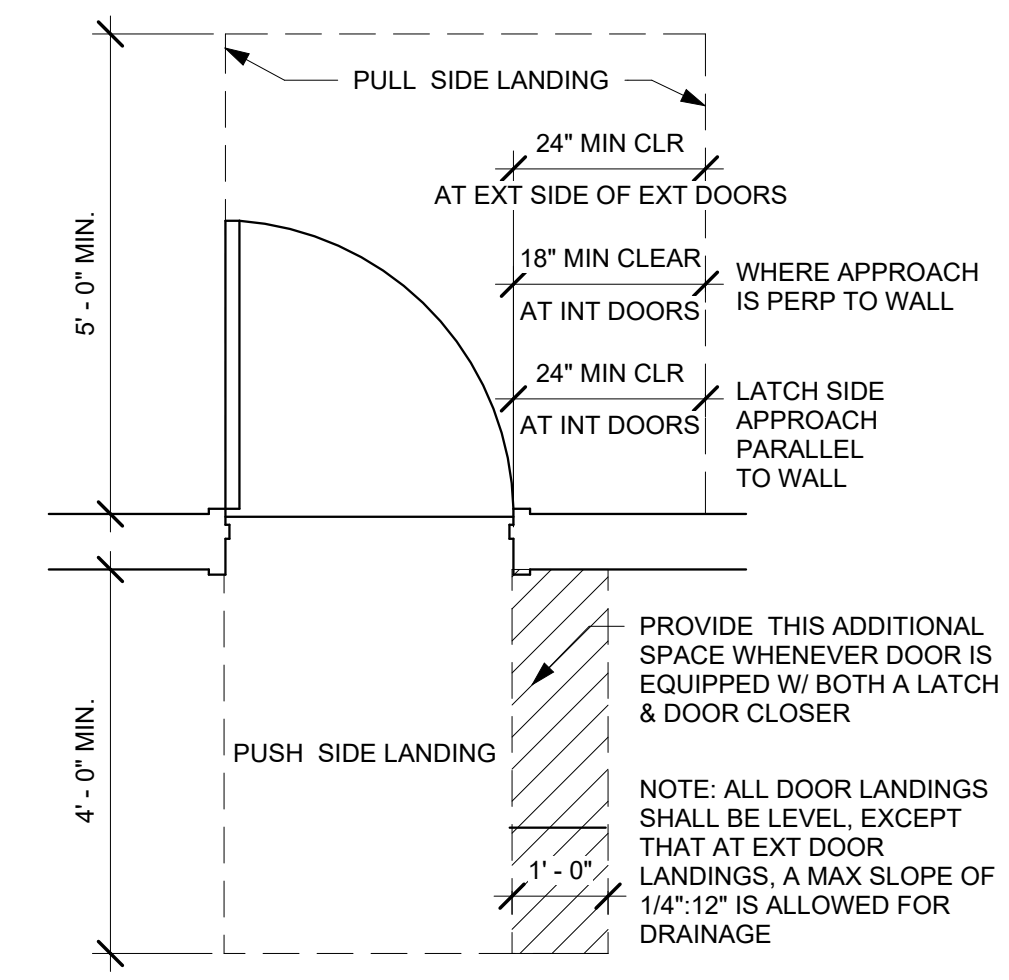
SIGNAGE GENERAL NOTES



- NOTES:**
- PROVIDE DOOR FRAME ANCHORAGE AS FOLLOWS: PROVIDE A MINIMUM OF 3 FRAME ANCHORS AT EA JAMB OF DOOR FRAMES. AT WALLS PROVIDE SNAP-IN FRAME ANCHORS AT 24" O.C. (2 MIN) WITH 3/8" DIA I.C.C. APPROVED EXPANSION BOLTS FROM ANCHOR TO CONCRETE (TYP) JAMB ANCHORS TO BE SPACED EQUALLY.
 - ATTACH ANCHORS TO WOOD FRAMING WITH #8 F.H.W.S., 1 1/2" MINIMUM PENETRATION.
 - BASE ANCHORS ARE ADDITIONAL TO THE NUMBER OF JAMB ANCHORS INDICATED ON THIS DIAGRAM.

- 2 HM FRAME ANCHORAGE**
1/4" = 1'-0"

- 1 ACCESSIBLE DOOR LANDINGS**
1/2" = 1'-0"



REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV 4.1.2026
2	ADDENDUM #4 5.6.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

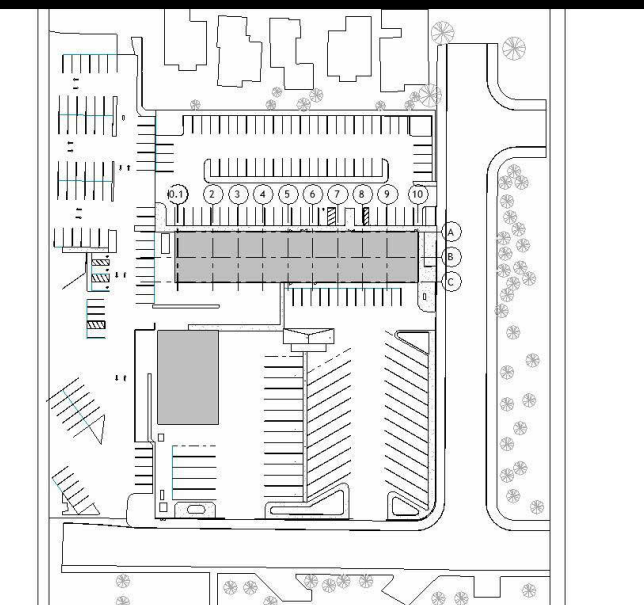


NEW ADMIN OFFICE REMODEL



RODOLFO LCHACON
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WWW.CHACONARCHITECTURE.COM

Project Number
Organization Description
NEW ADMIN OFFICE REMODEL
850 2ND STREET BRENTWOOD, CA 94513



SCHEDULES

A6.00

SECTION 06 4100
ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Wood Casework
- B. Laminated Plastic Casework
- C. Cabinet Hardware
- D. Preparation for installing utilities.

1.02 RELATED SECTIONS

- A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.
- B. Section 06 1000 - Rough Carpentry: Support framing, grounds, and concealed blocking.
- D. Division 09: pertinent sections specifying finishes adjacent to cabinets.
- E. Pertinent sections specifying plumbing and/or mechanical equipment interfacing cabinets.
- F. Pertinent sections specifying lighting and/or electrical equipment interfacing cabinets.

1.03 REFERENCE STANDARDS

- A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards.
- B. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards, U.S. Version 3.0.
- C. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood.
- D. NEMA LD 3 - High-Pressure Decorative Laminates.
- E. WI (CCP) - Certified Compliance Program (CCP).
- F. WI (MCP) - Monitored Compliance Program (MCP).
- G. California Code of Regulations, Title 24, Part 2, California Building Code (CBC), International Building Code.
- H. California Code of Regulations, Title 24, Part 11 California Green Building Standards Code, "CAL-Green".
- I. Architectural Woodwork Standards (AWS) latest edition, published jointly by the Woodwork Institute, Architectural Woodwork Institute, and the Architectural Woodwork Manufacturer's Association of Canada.

1.04 SUBMITTALS

- A. See General Conditions,
- B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories, hardware location and schedule of finishes.
 - 1. Scale of Drawings: 1-1/2 inch to 1 foot, minimum.
 - 2. Provide the information required by AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS).
 - 3. Include certification program label indicating that drawings fully meet the requirements of the AWS Millwork Grade specified.

- C. Product Data: Provide data for specified products, including hardware accessories. Demonstrate compliance with specified attributes.
- D. CAL-GREEN Submittals:
 1. Product Data – VOC Limits: For adhesives sealants, fillers, primers and coatings, documentation including printed statement of VOC contents, comply with limits specified in related section..
 2. Composite Wood Formaldehyde Limits: Provide certification that all products meet current CARB Airborne Toxic Control Measure (ATCM) for Composite Wood. Formaldehyde Limits by Mandatory Compliance Dates as specified in related section.
 3. Product Data - Low/No-VOC Paints and Coatings. Provide certification that all primers and coatings meet VOC emission limits specified in related section. List manufacturer, brand, application, type (flat or non-flat), number of gallon, and the VOC emissions in grams/liter. Include MSDS and product data sheet indicating VOC limits for each product provided.
- E. Samples:
 1. Full range of plastic laminates and edge tapes available from the specified group, of the specified manufacturer.
 2. Submit two samples of each hardware item to be provided, illustrating hardware finish .
 3. Three 12" x 12" finished samples of each veneer species and finish to be used and three 6" x 12" finished samples of each lumber species and finish.
- F. Closeout Submittals: AWS certificates of compliance indicating that installation fully meets requirements of AWS Millwork Grade specified.

1.05 QUALITY ASSURANCE

- A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.
 1. Company with at least one project in the past 5 years with value of woodwork within 20 percent of cost of woodwork for this Project.
 2. Accredited participant in the specified certification program prior to the commencement of fabrication and throughout the duration of the project.
- B. Quality Certification:
 1. Provide labels or certificates indicating that the installed work complies with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade or grades specified.
 2. Provide designated labels on shop drawings as required by certification program.
 3. Provide designated labels on installed products as required by certification program.
 4. Submit certifications upon completion of installation that verifies this work is in compliance with specified requirements.
 5. Replace, repair, or rework all work for which certification is refused.
- C. Single Source Responsibility: A single manufacturer shall provide and install the work described in this Section.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Protect units from moisture damage.
- B. Do not deliver woodwork, until the area of operation is enclosed, painting, wet work, grinding, overhead work and similar operations which could damage, soil or deteriorate woodwork are complete and the area is broom clean.
- C. If woodwork is stored in other than installation areas, store only in areas meeting requirements specified for installation areas.

- D. Do not install woodwork until required temperature and relative humidity are stable and will be maintained in installation areas.

1.07 FIELD CONDITIONS

- A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces in the range recommended by the Architectural Woodwork Standards for the location of the project.

PART 2 PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. VOC Limits for adhesives, sealants, fillers, primers and coatings . Comply with limits specified in related section.
- B. Composite Wood products must meet current CARB Airborne Toxic Control Measure (ATCM) for Composite Wood Formaldehyde Limits by Mandatory Compliance Dates as specified in related section.

2.02 CABINETS

- A. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI//AWMAC/WI (AWS) for Grades as indicated. Refer to SCHEDULES article
- B. Wood Veneer Faced Cabinets:
 - 1. Exposed Surfaces: HPVA HP-1 Grade A, Ash, plain sliced, random-matched.
 - 2. Semi-Exposed Surfaces: HPVA HP-1 Grade B, Ash, plain sliced, random-matched.
- C. Plastic Laminate Faced Cabinets:
 - 1. Exposed Interior Surfaces: Low Pressure Melamine in a pattern or color compatible with the exposed surfaces unless otherwise noted.
 - 2. Semi-Exposed Surfaces: White melamine.
- D. Cabinets:
 - 1. Door and Drawer Front Edge Profiles: Square edge with thin applied band.
 - a. Door and drawer fronts shall be 3/4 inch thick.
 - 2. Backs shall be full 3/4 inch thick.
 - 3. Casework Construction Type: Type A - Frameless.
 - 4. Interface Style for Cabinet and Door: Style 1 - Overlay; reveal overlay.
 - a. Where doors are notched for hinges seal exposed edges of core with paint to match adjacent panel surface.
 - 5. Cabinet Design Series: As indicated on drawings.
 - a. Fabricate cabinets with openings and mortises precut, to receive hardware, appliances, plumbing, fixtures, electrical work and similar items.
 - b. Smooth edges of cutoffs and, where located in countertops and similar exposures, seal edges of cutouts with a water resistant coating.
 - 6. Adjustable Shelf Loading: 50 lbs. per sq. ft..
 - a. Deflection: L/144.
 - b. Shelves over 36 inch in length, fixed or adjustable, shall be 1 inch thick.
 - 7. Cabinet Doors and Drawer Fronts: Flush style.
 - 8. Drawer Side Construction: Multiple-dovetailed.

2.03 WOOD-BASED COMPONENTS

- A. Wood fabricated from old growth timber is not permitted.

2.04 LUMBER MATERIALS

- A. Wood Moisture Content: Comply with requirements of referenced quality standard for moisture content of lumber at time of fabrication and for relative humidity conditions in the installation areas.

2.05 PANEL MATERIALS

- A. Acceptable Medium Density Fiberboard Manufacturers:
 - 1. SierraPine Limited; Roseville, CA, 800-676-3339; info@sierrapine.com.
 - 2. Substitutions: See Section 01 6000 - Product Requirements.
- B. Medium Density Fiberboard (MDF) Panels: ANSI A208.2, Grade 155. No added formaldehyde. SierraPine Medite II MDF as follows;
 - 1. Faces not required to be HPDL or wood veneer may be melamine, polyester or high-pressure laminate at fabricator's option. Color selected by Architect from full range of manufacturer's options, minimum of three choices.
 - 2. Composition: Lignocellulosic fibers and formaldehyde-free synthetic resin.
 - 3. Density: 44 to 49 lb/cu ft.
 - 4. Thickness: 1/4 to 1-1/4 inches, as indicated on drawings or as required by referenced standard for conditions indicated or necessary.
 - 5. Formaldehyde Content: Certified by Scientific Certification Systems to be made without use of phenol formaldehyde and to contain not more than 0.05 ppm formaldehyde.
 - 6. Force to Withdraw Screws at Panel Face: 225 pounds minimum, No.10 sheet metal screw.
 - 7. Force to Withdraw Screws at Panel Edge: 200 pounds minimum, No.10 sheet metal screw.
 - 8. Recycled Wood Content: Certified by Scientific Certification Systems for pre-consumer recycled wood fiber content
- C. Medium Density Fiberboard (MDF) Panels - Moisture Resistant Types, Provide at Sinks and Interior High Moisture Areas: ANSI A208.2, Grade 155. No added formaldehyde, SierraPine Medex MDF as follows;
 - 1. Meet all requirements specified above for Medium Density Fiberboard (MDF) Panels and the following:
 - a. Moisture-Resistant Panels: Withstanding the Accelerated Aging Tests specified in ASTM D 1037 without adverse effects.
- D. Hardwood Veneer Faced Panels: Particleboard or Medium Density Fiberboard of indicated type with following facings:
 - 1. Wood Veneer Facing for Transparent Finish: Species as specified above, veneer grade as specified above, veneer cut as specified above, book veneer match, running assembly match; unless otherwise indicated.
 - 2. Backing Sheet: Hardwood.
 - 3. Minimum Thickness, Face and Backing Sheets: 0.02 inch.
 - 4. Edge Trim: Custom grade solid hardwood in species and cut to match face sheet.
 - 5. Transparent Factory Finish: WI Custom grade, catalyzed lacquer, WI Finish 3A, clear.

2.06 LAMINATE MATERIALS

- A. Manufacturers:
 - 1. Formica Corporation: www.formica.com/#sle.
 - 2. Wilsonart International, Inc: www.wilsonart.com.
 - 3. Panolam Industries International, Inc: www.nevamar.com.
 - 4. Substitutions: See Section 01 6000 - Product Requirements.
- B. High Pressure Decorative Laminate (HPDL): NEMA LD 3, types as recommended for specific applications.

- C. Provide specific types as indicated.
 - 1. Horizontal Surfaces: HGS, 0.048 inch nominal thickness, through color, color as scheduled, finish as scheduled.
 - 2. Vertical Surfaces: VGS, 0.028 inch nominal thickness, through color, color as scheduled, finish as scheduled.
 - 3. Post-Formed Horizontal Surfaces: HGP, 0.039 inch nominal thickness, through color, color as scheduled, finish as scheduled.
 - 4. Post-Formed Vertical Surfaces: VGP, 0.028 inch nominal thickness, through color, color as scheduled, finish as scheduled.
 - 5. Flame Retardant Surfaces: HGF, 0.048 inch nominal thickness, through color, color as scheduled, finish as scheduled.
 - 6. Cabinet Liner: CLS, 0.020 inch nominal thickness, through color, color as scheduled, finish as scheduled.
 - 7. Laminate Backer: BKL, 0.020 inch nominal thickness, undecorated; for application to concealed backside of panels faced with high pressure decorative laminate.
- D. Colors, Patterns, and Finishes: As selected by Architect for manufacturer's full range of standard and premium colors and patterns, and as follows:
 - 1. Allow for different patterns/colors of base cabinet, upper cabinet and countertops in each building.
 - 2. Allow for different color scheme combination for each building.

2.07 COUNTERTOPS

- A. General: Types specified in Section 12 3600. Provide in accordance with WI Manual Sections cited to match quality grade(s) for cabinets indicated in this Section.

2.08 ACCESSORIES

- A. Adhesive: Type recommended by WI to suit application, urea formaldehyde-free.
 - 1. Wood Glue: Waterproof types as recommended by WI standards for the particular application. VOC content of not more than 30 g/L when calculated according to 40 CFR 59, Subpart D (EPA method 24).
 - 2. Adhesive for Bonding Plastic Laminate: Contact cement, for general use and for postforming. Use unpigmented product with through-color laminate.
- B. Plastic Edge Banding: Extruded PVC, flat shaped; smooth finish; self locking serrated tongue; of width to match component thickness. 3 mm thick, minimum.
 - 1. Color: As selected by Architect from manufacturer's full range.
 - a. Provide minimum of seventy-five color selections coordinated with plastic laminate selections, including patterns and woodgrains.
- C. Glass Shelves and Cabinet Door Inserts: Tempered Float Glass, ASTM C 1048, Kind FT, Condition A, Type I, Class 1 (clear) or obscure type as indicated, Quality-Q3, with exposed edges seamed before tempering, 6 mm thick minimum and thicker as indicated on drawings.
- D. Fasteners: Size and type to suit application.
- E. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application; galvanized or chrome-plated finish in concealed locations and stainless steel or chrome-plated finish in exposed locations.
- F. Concealed Joint Fasteners: Threaded steel.
- G. Grommets: plastic material for cut-outs, 2 inch diameter minimum, color as selected.

2.09 HARDWARE

- A. General: Meet or exceed specified requirements of AWI/AWMAC/WI - Architectural Woodwork Standards (AWS) and BHMA Grade 1; US 26D finish or as selected by Architect from manufacturer's standards.
- B. Shelf Support Clips: Plated steel, with support pin for drilled hole in cabinet standard and shelf, with pre-drilled hole for seismic fastener to shelf. Hettich Sekura #1 or equal. Plastic clips will be rejected.
- C. Door and Drawer Pulls: Provide at all doors and drawers, brushed stainless steel, 116 x 28 mm loop pull; Hafele, San Francisco, CA "Model 115.60.601", or equal .
- D. Cabinet Locks: Provide at all cabinets and drawers except sink cabinets. Locks to be keyed cylinder, two keys per lock, master keyed, steel with chrome finish.
- E. Catches: Magnetic.
- F. Drawer Slides:
 - 1. Type: Extension types as indicated.
 - 2. Static Load Capacity: Heavy Duty grade and minimum capacity ratings as follows;
 - a. File Drawers: Extra Heavy Duty grade 125 pounds.
 - b. Lateral File Drawers: Extra Heavy Duty grade 150 pounds.
 - c. Lateral File Drawers More Than 30" Wide: Extra Heavy Duty grade 200 pounds.
 - d. Drawers in excess of 36 inches wide: Extra Heavy Duty grade 150 pounds.
 - e. Pencil Drawers (less than 4 inches inside height): 50 pounds.
 - f. All other drawers: 75 pounds.
 - 3. Mounting: Side mounted.
 - 4. Stops: Integral type.
 - 5. Features: Provide self closing/stay closed type.
 - 6. Manufacturers:
 - a. Accuride International, Inc: www accuride.com/#sle.
 - b. Grass America Inc; Ball Bearing Slide System: www.grassusa.com/#sle.
 - c. Grass America Inc: www.grassusa.com.
 - d. Hettich America, LP: www.hettich.com/#sle.
 - e. Knappe & Vogt Manufacturing Company: www.knappeandvogt.com/#sle.
 - f. Substitutions: See Section 01 6000 - Product Requirements.
- G. Hinges: Stainless steel, five knuckle ANSI / BHMA Grade 1, non-removable pins, attached with screws that are inaccessible when closed, capable of 270 degree swing. Finish as selected by Architect. European style concealed hinges will be rejected.
 - 1. Manufacturer: Rockford Process Control "No. 376" or equal.
 - 2. Substitutions: See Section 01 6000 - Product Requirements.
- H. Latches: Finger-release type; Locate release not exceeding 40 inches above finish floor elevation, on either leaf of pair doors, to suit configurations shown.
- I. Grommets and covers: 2 inch diameter, ABS plastic; color as selected.
- J. File frames and followers: Pendaflex type at each drawer indicated as file drawer.
- K. Other Hardware: per referenced standard.

2.10 FABRICATION

- A. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.

- B. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.
 - 1. Cap exposed plastic laminate countertop finish ends and edges with material of same finish and pattern. Cap semi-exposed ends and edges with materials permitted by the Referenced Standard. Plastic Tee banding is not acceptable.
 - 2. Plastic Laminate Faced Cabinet Edge Band: 3mm PVC at doors, drawer fronts, false fronts, and at all other edges requiring banding.
 - 3. Wood Faced Cabinet Edge Band: 3mm wood edge band at doors, drawer fronts and false fronts, all other edges per the AWS.
- C. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.
- D. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Locate counter butt joints minimum 6 feet from sink cut-outs.
- E. Provide cutouts for plumbing fixtures. Verify locations of cutouts from on-site dimensions. Seal cut edges.

2.11 FABRICATION - COUNTERTOPS

- A. Fabricate countertops as specified in Section 12 3600 and to match quality grade standards specified in this section. In the event of conflict, the higher standard prevails.

2.12 SOURCE QUALITY CONTROL

- A. Labels: Certification of compliance, affixed by WI Inspector at the place of fabrication prior to shipment.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify location of blocking, adequacy of backing and support framing.
- B. Verify location and sizes of utility rough-in associated with work of this section.

3.02 INSTALLATION

- A. Set and secure casework in place; rigid, plumb, and level, free of distortions. Shim as required; use concealed shims.
- B. Use fixture attachments in concealed locations wherever possible for wall mounted components. Exposed fasteners at semi-exposed surfaces and exposed interior surfaces are acceptable when required to provide a seismic compliant installation.
 - 1. Exception: Exposed fastening permitted at access panels.
- C. Use concealed joint fasteners to align and secure adjoining cabinet units.
- D. Carefully scribe casework abutting other work, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.
- E. Secure cabinets to floors and walls using appropriate angles and anchorages.
- F. Shelves: Install adjustable shelves evenly spaced, with specified hardware. Securely attach shelves to earthquake clips.
- G. Countertops: Anchor securely to base units and other support systems and as specified in Section 12 3600.

H. Connection of sinks to plumbing systems as specified in pertinent related sections.

3.03 TOLERANCES.

- A. Site Tolerances: 1/8 inch in 8 feet for plumb and level; adjoining surfaces flush, without offset.
- B. Cabinet Tolerances: As specified in the referenced standard.

3.04 ADJUSTING

- A. Adjust installed work.
 - 1. Adjust and lubricate moving or operating parts to function smoothly and correctly.
 - 2. Adjust hardware to center doors and drawers in openings and to provide smooth operation.
- B. Touch-up shop-applied finishes to restore damaged or soiled areas.
- C. Repair damaged and defective woodwork and eliminate defects functionally and visually. Where repair is not possible replace woodwork. Adjust joinery for uniform appearance.

3.05 FIELD QUALITY CONTROL

- A. If Architect questions that installation quality may not conform to the specified AWS Quality Grade, Architect may order a final inspection by a WI Inspector.

3.06 CLEANING

- A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

3.07 PROTECTION OF FINISHED WORK

- A. Do not permit finished casework to be exposed to continued construction activity.
- B. Do not store materials or products on countertops. Do not stand or walk on countertops or use for construction access to building elements above floor level.
- C. Protect countertops with durable panel materials secured in place using methods which will not damage surfaces or finishes. Do not remove until Owner acceptance following move-in.

3.08 SCHEDULES

- A. All Other Locations:
 - 1. Quality: WI Custom Grade.
 - 2. Cabinet Construction: Plastic laminate faced.
 - 3. Countertops: Plastic laminate.

END OF SECTION

**SECTION 12 3600
COUNTERTOPS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Countertops for architectural cabinet work.

1.02 RELATED REQUIREMENTS

- A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.
- B. Section 01 8113 - Sustainable Design Requirements.
- C. Section 06 4100 - Architectural Wood Casework.
- D. Pertinent sections of other divisions specifying penetrating countertops.
- E. Pertinent sections of other divisions specifying assembly, installation, and connection of plumbing work, plumbing elements penetrating countertops or splashes.
- F. Pertinent sections of other divisions specifying assembly, installation, and connection of electrical work, electrical elements penetrating countertops or splashes.

1.03 REFERENCE STANDARDS

- A. ANSI A208.1 - American National Standard for Particleboard.
- B. ANSI A208.2 - American National Standard for Medium Density Fiberboard for Interior Use.
- C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- D. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards.
- E. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards, U.S. Version 3.0.
- F. California Code of Regulations, Title 24, Part 2, California Building Code (CBC), International Building Code.
- G. California Code of Regulations, Title 24, Part 11 California Green Building Standards Code, "CAL-Green".
- H. NEMA LD 3 - High-Pressure Decorative Laminates.
- I. PS 1 - Structural Plywood.
- J. WI (CCP) - Certified Compliance Program (CCP).
- K. AWI/AWMAC/WI - Architectural Woodwork Standards (AWS)

1.04 SUBMITTALS

- A. See Section 01 3300 - Submittals, for submittal procedures.
- B. Provide complete submittals at the same time as submittals for work in related sections to permit review of complete and integrated systems and assemblies.
- C. Product Data: Demonstrate compliance with specified attributes, provide Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Specimen warranty.

- D. CAL-GREEN Submittals:
 1. Product Data - VOC Limits: For adhesives, sealants, fillers, primers and coatings, documentation including printed statement of VOC contents, comply with limits specified in related section.
 2. Composite Wood Formaldehyde Limits: Provide certification that all products meet current CARB Airborne Toxic Control Measure (ATCM) for Composite Wood Formaldehyde Limits by Mandatory Compliance Dates as specified in related section.
- E. Shop Drawings: Complete details of materials and installation; combine with shop drawings of cabinets and casework specified in other sections.
- F. Selection Samples: For each finish product specified, color chips representing manufacturer's full range of available colors and patterns.
- G. Verification Samples: For each finish product specified, minimum size 6 inches square, representing actual product, color, and patterns.
- H. Test Reports: Chemical resistance testing, showing compliance with specified requirements.
- I. Certificate: Submit labels and certificates required by quality assurance and quality control programs.
- J. Installation Instructions: Manufacturer's installation instructions and recommendations.
- K. Maintenance Data: Manufacturer's instructions and recommendations for maintenance and repair of countertop surfaces.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator.
- B. Quality Certification:
 1. Provide labels or certificates indicating that the installed work complies with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade or grades specified.
 2. Provide designated labels on shop drawings as required by certification program.
 3. Provide designated labels on installed products as required by certification program.
 4. Submit certifications upon completion of installation that verifies this work is in compliance with specified requirements.
 5. Arrange and pay for inspections required for certification.
 6. Replace, repair, or rework all work for which certification is refused.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.07 FIELD CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. VOC Limits for adhesives, sealants, fillers, primers and coatings . Comply with limits specified in related section.

- B. Composite Wood products must meet current CARB Airborne Toxic Control Measure (ATCM) for Composite Wood Formaldehyde Limits by Mandatory Compliance Dates as specified in Section 01 6116.

2.02 COUNTERTOPS

- A. Quality Standard: See Section 06 4100.
- B. Plastic Laminate Countertops: High-pressure decorative laminate (HPDL) sheet bonded to substrate.
 - 1. Laminate Sheet: NEMA LD 3, Grade HGS, 0.048 inch nominal thickness.
 - a. Surface Burning Characteristics: Flame spread index of 25, maximum; smoke developed index of 450, maximum; when tested in accordance with ASTM E84.
 - b. NSF approved for food contact.
 - c. Wear Resistance: In addition to specified grade, comply with NEMA LD 3 High Wear Grade requirements for wear resistance.
 - d. Finish: Matte or suede, gloss rating of 5 to 20.
 - e. Manufacturers: Selected from those listed in Section 06 4100. Provide all materials from a single manufacturer.
 - 2. Exposed Edge Treatment: Square, substrate built up to minimum 1-1/4 inch thick; covered with matching laminate.
 - 3. Back and End Splashes: Same material, same construction.

2.03 MATERIALS

- A. Wood-Based Components:
 - 1. Wood fabricated from old growth timber is not permitted.
- B. Plywood for Supporting Substrate: PS 1 Exterior Grade, A-C veneer grade, minimum 5-ply; minimum 3/4 inch thick; join lengths using metal splines.
- C. Particleboard for Supporting Substrate: ANSI A208.1 Grade 2-M-2, 45 pcf minimum density; minimum 3/4 inch thick; join lengths using metal splines.
- D. Medium Density Fiberboard for Supporting Substrate: ANSI A208.2.
 - 1. Type specified in Section 06 4100.
- E. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials being joined.
- F. Countertop Support Brackets: Provide at locations where countertop span is not supported by base cabinet, maximum 36 inches on center.
 - 1. Steel, welded construction, powder coat finish, color selected by Architect.
 - 2. Support Arms: Match countertop depth, 2 inch flanges, extended concealed arm predrilled for bolting to wall studs or other support.
 - 3. A&M Hardware, Inc. 2.0 inch Concealed Brackets: www.AandMhardware.com.
 - 4. Substitutions: See Section 01 6000 - Product Requirements.
- G. Joint Sealant: Mildew-resistant silicone sealant, color-matched to countertop, clear at stainless steel.

2.04 FABRICATION

- A. Fabricate in accordance with standards governing fabrication quality that are specified in Section 06 4100.
- B. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.
 - 1. Join lengths of tops using best method recommended by manufacturer.

2. Fabricate to overhang fronts and ends of cabinets 1 inch except where top butts against cabinet or wall.
 3. Prepare all cutouts accurately to size; replace tops having improperly dimensioned or unnecessary cutouts or fixture holes.
 4. Locate openings accurately and use templates or roughing-in diagrams to provide accurate size and shape.
 5. Smooth edges of cutoffs and, where located in countertops and similar exposures, seal edges of cutouts with a water resistant coating.
- C. Provide back/end splash wherever counter edge abuts vertical surface unless otherwise indicated.
1. Secure to countertop with concealed fasteners and with contact surfaces set in waterproof glue.
 2. Height: 4 inches, unless otherwise indicated.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Verify that wall surfaces have been finished and mechanical and electrical services and outlets are installed in proper locations.

3.02 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

- A. Install concealed support brackets before wall finishes are applied. Install at spacings indicated on Drawings, except if none are shown, install at maximum 36 inches on center.
- B. Securely attach countertops to cabinets or concealed brackets using concealed fasteners. Make flat surfaces level; shim where required.
- C. Attach plastic laminate countertops using screws with minimum penetration into substrate board of 5/8 inch.
- D. Seal joint between back/end splashes and vertical surfaces.

3.04 TOLERANCES

- A. Variation From Horizontal: 1/8 inch in 10 feet, maximum.
- B. Offset From Wall, Countertops: 1/8 inch maximum; 1/16 inch minimum.
- C. Field Joints: 1/8 inch wide, maximum.

3.05 CLEANING

3.06 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

END OF SECTION