SECTION 061000 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Rough carpentry which meets the certification goals as established by the Victor Valley Community College District (VVCCD) Program for the individual Project requirements, of the following types.

B. Section Includes:
   1. Rooftop equipment bases and support curbs.
   2. Wood blocking, cants, and nailers.
   3. Wood furring.
   4. Wood sleepers.
   5. Utility shelving.
   6. Plywood backing panels.

C. Related Requirements:
   1. Section 061063 "Exterior Rough Carpentry" for elevated decks and other exterior construction made of wood.

1.3 DEFINITIONS

A. Exposed Framing: Framing not concealed by other construction.

B. Dimension Lumber: Lumber of 2 inches nominal or greater but less than 5 inches nominal in least dimension.

C. Timber: Lumber of 5 inches nominal or greater in least dimension.

D. Lumber grading agencies, and the abbreviations used to reference them, include the following:
   2. NLGA: National Lumber Grades Authority.
   3. RIS: Redwood Inspection Service.
   5. WCLIB: West Coast Lumber Inspection Bureau.
1.4 ACTION SUBMITTALS

A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.

1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained.
2. Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Include physical properties of treated materials based on testing by a qualified independent testing agency.
3. For fire-retardant treatments, include physical properties of treated lumber both before and after exposure to elevated temperatures, based on testing by a qualified independent testing agency according to ASTM D 5664.
4. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.
5. Include copies of warranties from chemical treatment manufacturers for each type of treatment.

B. LEED Submittals:

1. Certificates for Credit MR 6 and Credit MR 7: Chain-of-custody certificates indicating that products specified to be made from certified wood comply with forest certification requirements. Include documentation that manufacturer is certified for chain of custody by an FSC-accredited certification body. Include statement indicating cost for each certified wood product.
2. Product Data for Credit IEQ 4.1: For adhesives, documentation including printed statement of VOC content.

C. Fastener Patterns: Full-size templates for fasteners in exposed framing.

1.5 INFORMATIONAL SUBMITTALS

A. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.

B. Evaluation Reports: For the following, from ICC-ES:

1. Wood-preservative-treated wood.
2. Fire-retardant-treated wood.
5. Expansion anchors.
1.6 QUALITY ASSURANCE

A. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant treated material, an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

A. Certified Wood: Materials shall be produced from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship.

B. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.

C. Maximum Moisture Content of Lumber: Provide as required.

2.2 FIRE-RETARDANT-TREATED MATERIALS

A. General: Where fire-retardant-treated materials are indicated, use materials complying with requirements in this article, that are acceptable to authorities having jurisdiction, and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.

B. Fire-Retardant-Treated Lumber and Plywood by Pressure Process: Products with a flame spread index of 25 or less when tested according to ASTM E 84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet (3.2 m) beyond the centerline of the burners at any time during the test.

C. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent.

D. Identify fire-retardant-treated wood with appropriate classification marking of qualified testing agency.

E. For exposed items indicated to receive a stained or natural finish, use chemical formulations that do not bleed through, contain colorants, or otherwise adversely affect finishes.

F. Application: Treat all rough carpentry unless otherwise indicated.
2.3 MISCELLANEOUS LUMBER

A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:

B. For items of dimension lumber size, provide Construction or No. 2 or Standard, Stud, or No. 3 grade lumber.

C. For utility shelving, provide lumber with 15 or 19 percent maximum moisture content.

D. For concealed boards, provide lumber with 15 or 19 percent maximum moisture content.

E. For blocking not used for attachment of other construction, Utility, Stud, or No. 3 grade lumber of any species may be used provided that it is cut and selected to eliminate defects that will interfere with its attachment and purpose.

F. For blocking and nailers used for attachment of other construction, select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.

G. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails and damage to paneling.

2.4 PLYWOOD BACKING PANELS

A. Equipment Backing Panels: DOC PS 1.

2.5 FASTENERS

A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.

B. Nails, Brads, and Staples: ASTM F 1667.


D. Wood Screws: ASME B18.6.1.

E. Lag Bolts: ASME B18.2.1 (ASME B18.2.3.8M).

F. Bolts: Steel bolts complying with ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6); with ASTM A 563 (ASTM A 563M) hex nuts and, where indicated, flat washers.

G. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry assemblies and equal to four times the load imposed when installed in concrete as determined by testing per ASTM E 488 conducted by a qualified independent testing and inspecting agency.
2.6 MISCELLANEOUS MATERIALS

A. Sill-Sealer Gaskets: Glass-fiber-resilient insulation, fabricated in strip form, for use as a sill sealer; selected from manufacturer's standard widths to suit width of sill members indicated.

B. Sill-Sealer Gaskets: Closed-cell neoprene foam, selected from manufacturer's standard widths to suit width of sill members indicated.

C. Flexible Flashing: Composite, self-adhesive, flashing product consisting of a pliable, butyl rubber or rubberized-asphalt compound, bonded to a high-density polyethylene film, aluminum foil, or spunbonded polyolefin to produce an overall thickness of not less than 0.025 inch (0.6 mm).

D. Adhesives for Gluing Furring and Sleepers to Concrete or Masonry: Formulation complying with ASTM D 3498 that is approved for use indicated by adhesive manufacturer.

E. Water-Repellent Preservative: NWWDA-tested and -accepted formulation containing 3-iodo-2-propynyl butyl carbonate, combined with an insecticide containing chloropyrifos as its active ingredient.

PART 3 - EXECUTION

3.1 CONSTRUCTION WASTE MANAGEMENT

A. Manage construction waste in accordance with provisions of Section 01 74 19 Construction Waste Management and Disposal. Submit documentation to satisfy the requirements of that Section.
   1. Set aside scrap material to be returned to manufacturer for recycling into new product.

END OF SECTION 061000
SECTION 062023 - INTERIOR FINISH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Interior finish carpentry which meets the certification goals as established by the Victor Valley Community College District (VVCCD) Program for the individual Project requirements, of the following types.

B. Section Includes:

1. Interior trim.
2. Interior plywood, hardboard, board paneling.
4. Interior ornamental wood.

C. Related Requirements:

1. Section 061000 "Rough Carpentry" for furring, blocking, and other carpentry work not exposed to view.
2. Section 064400 "Ornamental Woodwork."
3. Section 099123 "Interior Painting" for priming and backpriming of interior finish carpentry.

1.3 DEFINITIONS

A. MDF: Medium-density fiberboard.

B. MDO: Plywood with a medium-density overlay on the face.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of process and factory-fabricated product. Indicate component materials, dimensions, profiles, textures, and colors and include construction and application details.

1. Include data for wood-preservation treatment from chemical-treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate
type of preservative used and net amount of preservative retained. Include chemical-
treatment manufacturer's written instructions for finishing treated material.

2. Include data for fire-retardant treatment from chemical-treatment manufacturer and
certification by treating plant that treated materials comply with requirements.

3. For products receiving a waterborne treatment, include statement that moisture content of
treated materials was reduced before shipment to Project site to levels specified.

4. Include copies of warranties from chemical-treatment manufacturers for each type of
treatment.

B. LEED Submittals:

1. Product Certificates for Credit MR 5: For products and materials required to comply
with requirements for regional materials, certificates indicating location of material
manufacturer and point of extraction, harvest, or recovery for each raw material. Include
statement indicating distance to Project, cost for each regional material, and fraction by
weight that is considered regional.

2. Certificates for Credit MR 6 or Credit MR 7: Chain-of-custody certificates indicating
that composite wood products comply with forest certification requirements. Include
documentation that manufacturer is certified for chain of custody by an FSC-accredited
certification body. Include statement indicating cost for each certified wood product.

3. Product Data for Credit IEQ 4.1: For adhesives and glues used at Project site,
documentation including printed statement of VOC content.

4. Product Data for Credit IEQ 4.4: For composite wood products, documentation
indicating that product contains no urea formaldehyde.

5. Laboratory Test Reports for Credit IEQ 4: For adhesives and composite wood products,
documentation indicating that products comply with the testing and product requirements
of the California Department of Health Services' "Standard Practice for the Testing of
Volatile Organic Emissions from Various Sources Using Small-Scale Environmental
Chambers."

C. Samples for Initial Selection: For each type of product involving selection of colors, profiles, or
textures.

D. Samples for Verification:

1. For each species and cut of lumber and panel products with non-factory-applied finish,
with 1/2 of exposed surface finished, 50 sq. in. (300 sq. cm) for lumber and 8 by 10
inches (200 by 250 mm) for panels.

2. For foam plastic moldings, with 1/2 of exposed surface finished; 50 sq. in. (300 sq. cm).

3. For each finish system and color of lumber and panel products with factory-applied
finish, 50 sq. in. (300 sq. cm) for lumber and 8 by 10 inches (200 by 250 mm) for panels.

1.5 INFORMATIONAL SUBMITTALS

A. Evaluation Reports: For fire-retardant-treated wood, from ICC-ES.

B. Sample Warranty: For manufacturer's warranty.
1.6 WARRANTY

A. Manufacturer's Warranty for Columns: Manufacturer agrees to repair or replace columns that fail in materials or workmanship within specified warranty period.

1. Warranty Period for Columns: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Regional Materials: The following wood products shall be manufactured within 500 miles (800 km) of Project site from materials that have been extracted, harvested, or recovered, as well as manufactured, within 500 miles (800 km) of Project site.

B. Certified Wood: The following wood products shall be produced from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship":

C. Low-Emitting Materials: Composite wood products shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

D. Lumber: DOC PS 20 and the following grading rules:

5. WCLIB: West Coast Lumber Inspection Bureau, Standard No. 17, "Grading Rules for West Coast Lumber."
6. WWPA: Western Wood Products Association, "Western Lumber Grading Rules."

E. Factory mark each piece of lumber with grade stamp of inspection agency indicating grade, species, moisture content at time of surfacing, and mill.

F. Softwood Plywood: DOC PS 1.

G. Hardboard: AHA A135.4.

H. MDF: ANSI A208.2, made with binder containing no urea-formaldehyde resin.
2.2 WOOD-PRESERVATIVE-TREATED MATERIALS

A. Preservative Treatment by Pressure Process: AWPA U1; Use Category UC2.

2.3 FIRE-RETARDANT-TREATED MATERIALS

A. General: For applications indicated, use materials complying with requirements in this article that are acceptable to authorities having jurisdiction, and comply with testing requirements; testing by a qualified testing agency.

B. Fire-Retardant-Treated Lumber and Plywood by Pressure Process: Products with a flame-spread index of 25 or less when tested according to ASTM E 84, with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet (3.2 m) beyond the centerline of the burners at any time during the test.

C. For exposed items indicated to receive a stained or natural finish, use organic resin or chemical formulations that do not contain colorants, and provide materials that do not have marks from spacer sticks on exposed face.

D. Do not use material that does not comply with requirements for untreated material or is warped or discolored.

E. Identify fire-retardant-treated wood with appropriate classification marking of testing and inspecting agency acceptable to authorities having jurisdiction.

2.4 INTERIOR TRIM

A. Softwood Lumber Trim for Transparent Finish (Stain or Clear Finish):

B. Hardwood Lumber Trim for Transparent Finish (Stain or Clear Finish):

C. Lumber Trim for Opaque Finish (Painted Finish):

D. Softwood Moldings for Transparent Finish (Stain or Clear Finish): WMMPA WM 4, N-grade wood moldings. Made to patterns included in WMMPA WM 12.

E. Hardwood Moldings for Transparent Finish (Stain or Clear Finish): WMMPA HWM 2, N-grade wood moldings made to patterns included in WMMPA HWM 1.

F. Moldings for Opaque Finish (Painted Finish): Made to patterns included in WMMPA WM 12.

G. PVC-Wrapped Moldings: WMMPA WM 2 and made to patterns included in WMMPA WM 12.

H. Foam Plastic Moldings: Molded product of shapes indicated, with a tough outer skin on exposed surfaces; factory primed. Exposed surfaces shall not be shaped after molding.
2.5  PANELING
A.  Hardwood Veneer Plywood Paneling: Manufacturer's stock hardwood plywood panels complying with HPVA HP-1, made without urea-formaldehyde adhesive.
B.  Hardboard Paneling: Interior factory-finished hardboard paneling complying with AHA 135.5.
C.  Board Paneling: Interior wood-board paneling complying with WMMPA WM 9.
D.  Board Paneling:

2.6  SHELVING AND CLOTHES RODS
A.  Shelving: Made from one of the following materials, 3/4 inch (19 mm) thick.
   1.  MDF with solid-wood front edge.
   2.  MDO softwood plywood with solid-wood edge.
   3.  Wood boards as specified above for lumber trim for opaque finish.
   4.  Softwood Boards: Douglas fir-larch, Douglas fir south, or hem-fir; Superior or C & Btr or Prime or D finish; NLGA, WCLIB, or WWPA; or southern pine, B & B or C finish; SPIB; kiln dried.
B.  Shelf Cleats: as indicated on drawings.
C.  Shelf Brackets with Rod Support: BHMA A156.16, B04051; prime-painted formed steel.
D.  Shelf Brackets without Rod Support: BHMA A156.16, B04041; prime-painted formed steel.
E.  Standards for Adjustable Shelf Brackets: BHMA A156.9, B04102.
F.  Adjustable Shelf Brackets: BHMA A156.9, B04112.
G.  Standards for Adjustable Shelf Supports: BHMA A156.9, B04071.
H.  Adjustable Shelf Supports: BHMA A156.9, B04081 or B04091.

2.7  MISCELLANEOUS MATERIALS
A.  Fasteners for Interior Finish Carpentry: Nails, screws, and other anchoring devices of type, size, material, and finish required for application indicated to provide secure attachment, concealed where possible.
B.  Low-Emitting Materials: Adhesives shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
C.  Glue: Aliphatic-resin, polyurethane, or resorcinol wood glue recommended by manufacturer for general carpentry use.
D. Installation Adhesive for Foam Plastic Moldings: Product recommended for indicated use by foam plastic molding manufacturer.

E. Paneling Adhesive: Comply with paneling manufacturer's written recommendations for adhesives.

F. Multipurpose Construction Adhesive: Formulation complying with ASTM D 3498 that is recommended for indicated use by adhesive manufacturer.

2.8 FABRICATION

A. Back out or kerf backs of the following members except those with ends exposed in finished work:
   1. Interior standing and running trim except shoe and crown molds.
   2. Wood-board paneling.

B. Ease edges of lumber less than 1 inch (25 mm) in nominal thickness to 1/16-inch (1.5-mm) radius and edges of lumber 1 inch (25 mm) or more in nominal thickness to 1/8-inch (3-mm) radius.

PART 3 - EXECUTION

3.1 CONSTRUCTION WASTE MANAGEMENT

A. Manage construction waste in accordance with provisions of Section 01 74 19 Construction Waste Management and Disposal. Submit documentation to satisfy the requirements of that Section.
   1. Set aside scrap material to be returned to manufacturer for recycling into new product.

END OF SECTION 062023
PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Plastic laminate faced architectural cabinets which meets the certification goals as established by the Victor Valley Community College District (VVCCD) Program for the individual Project requirements, of the following types.

B. Section Includes:

1. Plastic-laminate-faced architectural cabinets.
2. Wood furring, blocking, shims, and hanging strips for installing plastic-laminate-faced architectural cabinets unless concealed within other construction before cabinet installation.

C. Related Requirements:

1. Section 061000 "Rough Carpentry" for wood furring, blocking, shims, and hanging strips required for installing cabinets and concealed within other construction before cabinet installation.
2. Section 123623.13 "Plastic-Laminate-Clad Countertops."

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product, including panel products high-pressure decorative laminate, adhesive for bonding, plastic laminate, fire-retardant-treated materials, and cabinet hardware and accessories.

1. Include data for fire-retardant treatment from chemical-treatment manufacturer and certification by treating plant that treated materials comply with requirements.

B. LEED Submittals:

1. Product Data for Credit MR 4: For products having recycled content, documentation indicating percentages by weight of postconsumer and pre-consumer recycled content. Include statement indicating cost for each product having recycled content.
2. Product Certificates for Credit MR 5: For products and materials required to comply with requirements for regionally manufactured materials. Include statement indicating cost for each regionally manufactured material.
   a. Include statement indicating location of manufacturer and distance to Project for each regionally manufactured material.

3. Certificates for Credit MR 6 or Credit MR 7: Chain-of-custody certificates indicating that products specified to be made from certified wood comply with forest certification and chain-of-custody requirements. Include statement indicating cost for each certified wood product.

4. Laboratory Test Reports for Credit IEQ 4.1: For adhesives, documentation indicating that products comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

5. Product Data for Credit IEQ 4.4: For adhesives and composite wood products, documentation indicating that products contain no urea formaldehyde.

6. Laboratory Test Reports for Credit IEQ 4.4: For composite wood products, documentation indicating that products comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

C. Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.
   1. Show details full size.
   2. Show locations and sizes of furring, blocking, and hanging strips, including concealed blocking and reinforcement specified in other Sections.
   3. Show locations and sizes of cutouts and holes for electrical switches and outlets and other items installed in architectural plastic-laminate cabinets.
   4. Apply WI Certified Compliance Program label to Shop Drawings.
   5. Apply AWI Quality Certification Program label to Shop Drawings.

D. Samples for Initial Selection:
   1. Plastic laminates.
   2. PVC edge material.
   3. Thermoset decorative panels.

E. Samples for Verification:
   1. Plastic laminates, for each type, color, pattern, and surface finish, with one sample applied to core material and specified edge material applied to one edge.
   2. Wood-grain plastic laminates, for each type, pattern and surface finish[, with one sample applied to core material] [and specified edge material applied to one edge.
   3. Thermoset decorative panels, for each color, pattern, and surface finish, with edge banding on one edge.
   4. Corner pieces as follows:
a. Cabinet-front frame joints between stiles and rails, as well as exposed end pieces, 18 inches (450 mm) high by 18 inches (450 mm) wide by 6 inches (150 mm) deep.
b. Miter joints for standing trim.

5. Exposed cabinet hardware and accessories, one unit for each type and finish.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For fabricator.

B. Product Certificates: For each type of product.
   1. Composite wood and agrifiber products.
   2. Thermoset decorative panels.
   3. High-pressure decorative laminate.
   4. Glass.
   5. Adhesives.

C. Woodwork Quality Standard Compliance Certificates: WI Certified Compliance Program certificates.

D. Evaluation Reports: For fire-retardant-treated materials, from ICC-ES.

1.5 QUALITY ASSURANCE

A. Fabricator Qualifications: Shop that employs skilled workers who custom fabricate products similar to those required for this Project and whose products have a record of successful in-service performance. Shop is a licensee of WI's Certified Compliance Program.

B. Installer Qualifications: Licensee of WI's Certified Compliance Program.

C. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant-treated material, an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

D. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
   1. Build mockups of typical plastic-laminate cabinets as shown on Drawings.
   2. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
PART 2 - PRODUCTS

2.1 ARCHITECTURAL CABINET FABRICATORS

2.2 PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS

A. Quality Standard: Unless otherwise indicated, comply with the "Architectural Woodwork Standards" for grades of architectural plastic-laminate cabinets indicated for construction, finishes, installation, and other requirements.

1. Provide labels and certificates for WI certification program indicating that woodwork, including installation, complies with requirements of grades specified.
2. The Contract Documents contain selections chosen from options in the quality standard and additional requirements beyond those of the quality standard. Comply with those selections and requirements in addition to the quality standard.

B. Grade: Premium.

C. Regional Materials: Plastic-laminate cabinets shall be manufactured within 500 miles (800 km) of Project site.

D. Certified Wood: Plastic-laminate cabinets shall be made from wood products certified as "FSC Pure" according to FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship," and FSC STD-40-004, "FSC Standard for Chain of Custody Certification."

E. Type of Construction: Match current style used in existing building.

F. Cabinet, Door, and Drawer Front Interface Style: Match current style used in existing building.

G. Reveal Dimension: Match current style used in existing building.

H. High-Pressure Decorative Laminate: NEMA LD 3, grades as indicated or if not indicated, as required by woodwork quality standard.

I. Dust Panels: 1/4-inch (6.4-mm) plywood or tempered hardboard above compartments and drawers unless located directly under tops.

J. Concealed Backs of Panels with Exposed Plastic-Laminate Surfaces: High-pressure decorative laminate, NEMA LD 3, Grade BKL.

K. Drawer Construction: Fabricate with exposed fronts fastened to subfront with mounting screws from interior of body.

L. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
2.3 WOOD MATERIALS

A. Wood Products: Provide materials that comply with requirements of referenced quality standard for each type of woodwork and quality grade specified unless otherwise indicated.

B. Composite Wood and Agrifiber Products: Provide materials that comply with requirements of referenced quality standard for each type of woodwork and quality grade specified unless otherwise indicated.

2.4 FIRE-RETARDANT-TREATED MATERIALS

A. Fire-Retardant-Treated Materials, General: Where fire-retardant-treated materials are indicated, use materials complying with requirements in this article that are acceptable to authorities having jurisdiction and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.

B. Fire-Retardant-Treated Lumber and Plywood: Products with a flame-spread index of 25 or less when tested according to ASTM E 84, with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet (3.2 m) beyond the centerline of the burners at any time during the test.

C. Fire-Retardant Particleboard: Panels complying with the following requirements, made from softwood particles and fire-retardant chemicals mixed together at time of panel manufacture to achieve flame-spread index of 25 or less and smoke-developed index of 25 or less per ASTM E 84.

D. Fire-Retardant Fiberboard: Medium-density fiberboard panels complying with ANSI A208.2, made from softwood fibers, synthetic resins, and fire-retardant chemicals mixed together at time of panel manufacture to achieve flame-spread index of 25 or less and smoke-developed index of 200 or less per ASTM E 84.

2.5 CABINET HARDWARE AND ACCESSORIES

A. General: Provide cabinet hardware and accessory materials associated with architectural cabinets except for items specified in Section 087111 "Door Hardware (Descriptive Specification)."

B. Butt Hinges: 2-3/4-inch (70-mm), five-knuckle steel hinges made from 0.095-inch- (2.4-mm-) thick metal, and as follows:

C. Frameless Concealed Hinges (European Type): BHMA A156.9, B01602, self-closing.

D. Back-Mounted Pulls: BHMA A156.9, B02011.

E. Wire Pulls: Back mounted.
F. Catches: [Magnetic catches, BHMA A156.9, B03141] [Push-in magnetic catches, BHMA A156.9, B03131] [Roller catches, BHMA A156.9, B03071] [Ball friction catches, BHMA A156.9, B03013].

G. Adjustable Shelf Standards and Supports: BHMA A156.9, B04071.

H. Shelf Rests: BHMA A156.9, B04013.

I. Drawer Slides: BHMA A156.9.

J. Slides for Sliding Glass Doors: BHMA A156.9, B07063.

K. Door Locks: BHMA A156.11, E07121.

L. Drawer Locks: BHMA A156.11, E07041.

M. Door and Drawer Silencers: BHMA A156.16, L03011.

N. Float Glass for Cabinet Doors: ASTM C 1036.

O. Tempered Float Glass for Cabinet Doors: ASTM C 1048.


Q. Decorative Glass for Cabinet Doors: Provide decorative glass complying with Section 088113 "Decorative Glass Glazing."

R. Tempered Float Glass for Cabinet Shelves: ASTM C 1048

S. Exposed Hardware Finishes: For exposed hardware, provide finish that complies with BHMA A156.18 for BHMA finish number indicated.

T. For concealed hardware, provide manufacturer's standard finish that complies with product class requirements in BHMA A156.9.

2.6 MISCELLANEOUS MATERIALS

A. Furring, Blocking, Shims, and Hanging Strips: kiln dried to less than 15 percent moisture content.

B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide metal expansion sleeves or expansion bolts for post-installed anchors. Use nonferrous-metal or hot-dip galvanized anchors and inserts at inside face of exterior walls and at floors.

C. Adhesives: Do not use adhesives that contain urea formaldehyde.

D. Adhesives: Use adhesives that meet the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
E. Sand fire-retardant-treated wood lightly to remove raised grain on exposed surfaces before fabrication.

F. Fabricate cabinets to dimensions, profiles, and details indicated.

G. Complete fabrication, including assembly and hardware application, to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.

H. Shop-cut openings to maximum extent possible to receive hardware, appliances, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.

I. Install glass to comply with applicable requirements in Section 088000 "Glazing" and in GANA's "Glazing Manual." For glass in wood frames, secure glass with removable stops.

PART 3 - EXECUTION

3.1 CONSTRUCTION WASTE MANAGEMENT

A. Manage construction waste in accordance with provisions of Section 01 74 19 Construction Waste Management and Disposal. Submit documentation to satisfy the requirements of that Section.
   1. Set aside scrap material to be returned to manufacturer for recycling into new product.

END OF SECTION 064116