

**SECTION 06 0573**  
**WOOD TREATMENT**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Site applied termiticide for wood materials.
- B. Site applied termiticide for other building materials.
- C. Site applied mildicide for wood materials.

**1.02 RELATED REQUIREMENTS**

- A. Section 06 1000 - Rough Carpentry: Factory treatment for wood products.
- B. Section 06 1500 - Wood Decking: Factory treatment for wood products.

**1.03 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide technical data on insulated sheathing, wood preservative materials, and application instructions.
- C. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

**1.04 DELIVERY, STORAGE, AND HANDLING**

- A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.
- B. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.

**1.05 WARRANTY**

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Site Applied Termiticide and Mildicide: Correct defective Work within a twenty-five year period after Date of Substantial Completion.

**PART 2 PRODUCTS**

**2.01 SITE APPLIED WOOD TREATMENT**

- A. Site Applied Termiticide and Mildicide: Borate mineral salt based, spray applied termiticide, mildicide and mold growth preventative.
- B. Site Applied Termiticide for Wood, Steel and Concrete: Borate mineral salt based, spray applied termiticide formulated for use on wood, steel, concrete and other building materials.

**PART 3 EXECUTION**

**3.01 PREPARATION**

- A. Remove dust, dirt and other contaminants from treatment surfaces. Remove tarpaulins, dropcloths, strippable protective films, etc., from areas to be treated. Move equipment and stored materials that block or prevent product application.

**3.02 INSTALLATION - GENERAL**

- A. Provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

**3.03 SITE APPLIED WOOD TREATMENT**

- A. Comply with manufacturers written mixing and installation instructions.
- B. Termiticide: Apply to foundations, structure and other items as listed.
  - 1. All structural wood and sill plates within 24 inches, minimum, of point of contact with foundation.

2. All wood, wood based and cellulosic sheathing within 24 inches, minimum, of point of contact with foundation.
  3. Concrete foundations 2 inches, minimum, from sill plate.
  4. All pipe and plumbing penetrations up to 24 inches, minimum, above slab and slab surface within 6 inches, minimum, of pipe or penetration.
  5. Six inches, minimum, on either side of control joints and construction joints in slabs and joints between slabs and abutting material.
- C. Mildicide: Apply to wood and wood based building materials as listed.
1. All structural wood and sill plates within 24 inches, minimum, of point of contact with foundation.
  2. All wood, wood based and cellulosic sheathing within 24 inches, minimum, of point of contact with foundation.

**END OF SECTION**

**SECTION 06 1000  
ROUGH CARPENTRY**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Structural dimension lumber framing.
- B. Rough opening framing for doors, windows, and roof openings.
- C. Sheathing.
- D. Subflooring.
- E. Roof-mounted curbs.
- F. Roofing nailers.
- G. Roofing cant strips.
- H. Preservative treated wood materials.
- I. Fire retardant treated wood materials.
- J. Communications and electrical room mounting boards.
- K. Concealed wood blocking, nailers, and supports.
- L. Miscellaneous wood nailers, furring, and grounds.

**1.02 RELATED REQUIREMENTS**

- A. Section 05 5000 - Metal Fabrications: Miscellaneous steel connectors and support angles for wood framing.
- B. Section 06 0573 - Wood Treatment: Field-applied termiticide and mildicide for wood.
- C. Section 06 1500 - Wood Decking.
- D. Section 07 2500 - Weather Barriers: Air barrier over sheathing.
- E. Section 07 2500 - Weather Barriers: Water-resistive barrier over sheathing.
- F. Section 07 6200 - Sheet Metal Flashing and Trim: Sill flashings.
- G. Section 09 2116 - Gypsum Board Assemblies: Gypsum-based sheathing.

**1.03 REFERENCE STANDARDS**

- A. AWC (WFCM) - Wood Frame Construction Manual for One- and Two-Family Dwellings; 2015.
- B. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2016a.
- C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.
- D. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2013.
- E. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2016.
- F. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2014a.
- G. ASTM D2898 - Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing; 2010.
- H. ASTM E2357 - Standard Test Method for Determining Air Leakage of Air Barrier Assemblies; 2011.
- I. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2016.
- J. AWPA U1 - Use Category System: User Specification for Treated Wood; 2017.

- K. ICC (IBC) - International Building Code; 2015.
- L. ICC (IECC) - International Energy Conservation Code; 2012.
- M. ICC-ES AC308 - Acceptance Criteria for Water-Resistive Barriers; ICC Evaluation Service, Inc; 2013.
- N. PS 1 - Structural Plywood; 2009.
- O. PS 2 - Performance Standard for Wood-Based Structural-Use Panels; 2010.
- P. PS 20 - American Softwood Lumber Standard; 2015.
- Q. WWPA G-5 - Western Lumber Grading Rules; 2011.

#### **1.04 QUALITY ASSURANCE**

- A. Air Barrier Association of America (ABAA) Quality Assurance Program (QAP); [www.airbarrier.org/#sle](http://www.airbarrier.org/#sle):
  - 1. Installer Qualification: Use accredited contractor, certified installers, evaluated materials, and third-party field quality control audit.
  - 2. Manufacturer Qualification: Use evaluated materials from a single manufacturer regularly engaged in air barrier material manufacture. Use secondary materials approved in writing by primary material manufacturer.

#### **1.05 DELIVERY, STORAGE, AND HANDLING**

- A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.
- B. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.

#### **1.06 WARRANTY**

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.

### **PART 2 PRODUCTS**

#### **2.01 GENERAL REQUIREMENTS**

- A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
  - 1. Species: Douglas Fir, unless otherwise indicated.
- B. Lumber fabricated from old growth timber is not permitted.

#### **2.02 DIMENSION LUMBER**

- A. Grading Agency: Western Wood Products Association; WWPA G-5.
- B. Sizes: Nominal sizes as indicated on drawings, S4S.
- C. Moisture Content: S-dry or MC19.
- D. Stud Framing (2 by 2 through 2 by 6 ):
  - 1. Grade: No. 2.
- E. Joist, Rafter, and Small Beam Framing (2 by 6 through 4 by 16 ):
  - 1. Species: Douglas Fir-Larch.
  - 2. Grade: No. 1 & Btr.
- F. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
  - 1. Lumber: S4S, No. 2 or Standard Grade.

#### **2.03 CONSTRUCTION PANELS**

- A. Subflooring: Any PS 2 type, rated Sheathing.
  - 1. Bond Classification: Exterior.
  - 2. Span Rating: 48.
  - 3. Performance Category: 3/4 PERF CAT.
- B. Roof Sheathing: Wood construction panel laminated to insulation board.

1. Construction Panel: 5/8 inch (16 mm) CDX plywood.
  2. Insulation Board: Polyisocyanurate foam plastic with cellulosic felt facer or glass fiber mat facer on major surface opposite construction panel.
  3. Finished Panel: Comply with ASTM C1289, Type V.
- C. Wall Sheathing: Glass mat faced gypsum, ASTM C1177/C1177M, 5/8 inch Type X fire resistant.
1. At Assemblies Indicated with Fire-Rating: Use type required by indicated tested assembly.
  2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
  3. Edges: Square.
- D. Communications and Electrical Room Mounting Boards: PS 1 A-D plywood, or medium density fiberboard; 3/4 inch thick; flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.

#### **2.04 ACCESSORIES**

- A. Fasteners and Anchors:
1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
- B. Joist Hangers: Hot dipped galvanized steel, sized to suit framing conditions.
1. For contact with preservative treated wood in exposed locations, provide minimum G185 galvanizing complying with ASTM A653/A653M.
- C. Sill Gasket on Top of Foundation Wall: 1/4 inch thick, plate width, closed cell plastic foam from continuous rolls.
- D. Sill Flashing: As specified in Section 07 6200.
- E. Subfloor Glue: Waterproof, air cure type, cartridge dispensed.
- F. Water-Resistive Barrier: As specified in Section 07 2500.
- G. Building Paper: Water resistant Kraft paper.
- H. Termite Shield: Galvanized sheet steel, 1/16 inch thick.

#### **2.05 FACTORY WOOD TREATMENT**

- A. Treated Lumber and Plywood: Comply with requirements of AWWA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
1. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements.
  2. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWWA standards.
- B. Fire Retardant Treatment:
1. Exterior Type: AWWA U1, Category UCFB, Commodity Specification H, chemically treated and pressure impregnated; capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes both before and after accelerated weathering test performed in accordance with ASTM D2898.
    - a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
    - b. Do not use treated wood in direct contact with the ground.
  2. Interior Type A: AWWA U1, Use Category UCFA, Commodity Specification H, low temperature (low hygroscopic) type, chemically treated and pressure impregnated; capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes.

- a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
  - b. Treat rough carpentry items as indicated .
  - c. Do not use treated wood in applications exposed to weather or where the wood may become wet.
- C. Preservative Treatment:
- 1. Preservative Pressure Treatment of Lumber Above Grade: AWWA U1, Use Category UC3B, Commodity Specification A using waterborne preservative.
    - a. Kiln dry lumber after treatment to maximum moisture content of 19 percent.
    - b. Treat lumber exposed to weather.
    - c. Treat lumber in contact with roofing, flashing, or waterproofing.
    - d. Treat lumber in contact with masonry or concrete.
  - 2. Preservative Pressure Treatment of Plywood Above Grade: AWWA U1, Use Category UC2 and UC3B, Commodity Specification F using waterborne preservative.
    - a. Kiln dry plywood after treatment to maximum moisture content of 19 percent.
    - b. Treat plywood in contact with roofing, flashing, or waterproofing.
    - c. Treat plywood in contact with masonry or concrete.
    - d. Treat plywood less than 18 inches above grade.

### **PART 3 EXECUTION**

#### **3.01 PREPARATION**

- A. Install sill gasket under sill plate of framed walls bearing on foundations; puncture gasket cleanly to fit tightly around protruding anchor bolts.
- B. Coordinate installation of rough carpentry members specified in other sections.

#### **3.02 INSTALLATION - GENERAL**

- A. Select material sizes to minimize waste.
- B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.
- C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

#### **3.03 FRAMING INSTALLATION**

- A. Set structural members level, plumb, and true to line. Discard pieces with defects that would lower required strength or result in unacceptable appearance of exposed members.
- B. Make provisions for temporary construction loads, and provide temporary bracing sufficient to maintain structure in true alignment and safe condition until completion of erection and installation of permanent bracing.
- C. Install structural members full length without splices unless otherwise specifically detailed.
- D. Comply with member sizes, spacing, and configurations indicated, and fastener size and spacing indicated, but not less than required by applicable codes, AWC (WFCM) Wood Frame Construction Manual, and Structural Drawings.
- E. Install horizontal spanning members with crown edge up and not less than 1-1/2 inches of bearing at each end.
- F. Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists; use metal joist hangers unless otherwise detailed.
- G. Provide bridging at joists in excess of 8 feet span as detailed. Fit solid blocking at ends of members.
- H. Frame wall openings with two or more studs at each jamb; support headers on cripple studs.

### **3.04 BLOCKING, NAILERS, AND SUPPORTS**

- A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.
- B. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.
- C. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.
- D. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.
- E. Provide the following specific non-structural framing and blocking:
  - 1. Cabinets and shelf supports.
  - 2. Wall brackets.
  - 3. Handrails.
  - 4. Grab bars.
  - 5. Wall-mounted door stops.
  - 6. Wall paneling and trim.
  - 7. Joints of rigid wall coverings that occur between studs.

### **3.05 ROOF-RELATED CARPENTRY**

- A. Coordinate installation of roofing carpentry with deck construction, framing of roof openings, and roofing assembly installation.
- B. Provide wood curb at all roof openings except where specifically indicated otherwise. Form corners by alternating lapping side members.

### **3.06 INSTALLATION OF CONSTRUCTION PANELS**

- A. Subflooring: Glue and nail to framing; staples are not permitted.
- B. Roof Sheathing: Secure panels with long dimension perpendicular to framing members, with ends staggered and over firm bearing.
  - 1. Nail panels to framing; staples are not permitted.
- C. Wall Sheathing: Secure with long dimension perpendicular to wall studs, with ends over firm bearing and staggered, using nails, screws, or staples.
  - 1. Place water-resistive barrier horizontally over wall sheathing, weather lapping edges and ends.
- D. Communications and Electrical Room Mounting Boards: Secure with screws to studs with edges over firm bearing; space fasteners at maximum 24 inches on center on all edges and into studs in field of board.
  - 1. At fire-rated walls, install board over wall board indicated as part of the fire-rated assembly.
  - 2. Where boards are indicated as full floor-to-ceiling height, install with long edge of board parallel to studs.
  - 3. Install adjacent boards without gaps.

### **3.07 SITE APPLIED WOOD TREATMENT**

- A. Apply preservative treatment compatible with factory applied treatment at site-sawn cuts, complying with manufacturer's instructions.
- B. Allow preservative to dry prior to erecting members.

### **3.08 TOLERANCES**

- A. Framing Members: 1/4 inch from true position, maximum.
- B. Surface Flatness of Floor: 1/8 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

- C. Variation from Plane (Other than Floors): 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

### **3.09 FIELD QUALITY CONTROL**

- A. See Section 01 4000 - Quality Requirements, for additional requirements.
- B. Coordination of ABAA Tests and Inspections:
  - 1. Provide testing and inspection required by ABAA QAP.
  - 2. Notify in ABAA writing of schedule for air barrier work. Allow adequate time for testing and inspection.
  - 3. Cooperate with ABAA testing agency.
  - 4. Allow access to air barrier work areas and staging.
  - 5. Do not cover air barrier work until tested, inspected, and accepted.

### **3.10 CLEANING**

- A. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill.
- B. Prevent sawdust and wood shavings from entering the storm drainage system.

**END OF SECTION**



**SECTION 06 1500**  
**WOOD DECKING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Plywood structural wood decking.
- B. Fire retardant treatment of wood.

**1.02 RELATED REQUIREMENTS**

- A. Section 04 2000 - Unit Masonry: Bearing support.
- B. Section 06 1000 - Rough Carpentry: Bearing support.
- C. Section 09 9113 - Exterior Painting: Field finishing.

**1.03 REFERENCE STANDARDS**

- A. ASTM D2898 - Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing; 2010.
- B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2016.
- C. AWPA U1 - Use Category System: User Specification for Treated Wood; 2017.
- D. PS 1 - Structural Plywood; 2009.

**1.04 QUALITY ASSURANCE**

- A. Designer Qualifications: Design decking under direct supervision of a Professional Structural Engineer experienced in design of work of this type and licensed in the State in which the Project is located.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.

**PART 2 PRODUCTS**

**2.01 WOOD MATERIALS**

- A. Wood fabricated from old growth timber is not permitted.
- B. Plywood Decking: PS 1 veneer plywood; APA Rated Sheathing, Span Rating 60; Exterior grade; 1 A interior veneer appearance grade; sanded.

**2.02 ACCESSORIES**

- A. Fasteners and Anchors:
  - 1. Fastener Type and Finish: Hot-dipped galvanized steel for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
  - 2. Screws: Bugle head, hardened steel, power driven type, length three times thickness of decking.

**2.03 WOOD TREATMENT**

- A. Fire Retardant Treatment:
  - 1. Exterior Type: AWPA U1, Use Category UCFB, Commodity Specification H, chemically treated and pressure impregnated; with maximum flame spread index of 25 when tested in accordance with ASTM E84 and with no evidence of significant combustion when test is extended for an additional 20 minutes both before and after accelerated weathering test performed in accordance with ASTM D2898.
    - a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that support framing is ready to receive decking.

### **3.02 PREPARATION**

- A. Coordinate placement of support items.

### **3.03 INSTALLATION - PLYWOOD DECKING**

- A. Install decking perpendicular to framing members with ends staggered over firm bearing. On sloped surfaces, lay decking with tongue upward.
- B. Engage plywood tongue and groove edges.
- C. Allow expansion space at edges and ends.
- D. Attach decking with adhesive and screws.
- E. Use sheathing clips at unsupported edges of plywood between supporting framing members.

### **3.04 TOLERANCES**

- A. Surface Flatness of Decking Without Load: 1/4 inch in 10 feet maximum, and 1/2 inch in 30 feet maximum.

**END OF SECTION**

**SECTION 06 2000**  
**FINISH CARPENTRY**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Finish carpentry items.
- B. Wood casings and moldings.
- C. Hardware and attachment accessories.

**1.02 RELATED REQUIREMENTS**

- A. Section 06 1000 - Rough Carpentry: Support framing, grounds, and concealed blocking.
- B. Section 06 4100 - Architectural Wood Casework: Shop fabricated custom cabinet work.
- C. Section 08 1416 - Flush Wood Doors.
- D. Section 09 9113 - Exterior Painting: Painting and finishing of finish carpentry items.
- E. Section 09 9123 - Interior Painting: Painting and finishing of finish carpentry items.

**1.03 REFERENCE STANDARDS**

- A. ANSI A135.4 - American National Standard for Basic Hardboard; 2012.
- B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2016.
- C. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.
- D. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards, U.S. Version 3.0; 2016.
- E. AWPA U1 - Use Category System: User Specification for Treated Wood; 2017.
- F. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood; 2016.
- G. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.
- H. PS 1 - Structural Plywood; 2009.

**1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Coordinate the work with plumbing rough-in, electrical rough-in, and installation of associated and adjacent components.
- B. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

**1.05 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.
  - 1. Provide the information required by AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS).
- C. Samples: Submit two samples of finish plywood, 6 by 6 inch in size illustrating wood grain and specified finish.
- D. Samples: Submit two samples of wood trim 6 inch long.

**1.06 QUALITY ASSURANCE**

- A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.

**1.07 DELIVERY, STORAGE, AND HANDLING**

- A. Protect work from moisture damage.

## **PART 2 PRODUCTS**

### **2.01 FINISH CARPENTRY ITEMS**

- A. Quality Standard: Custom Grade, in accordance with AWI/AWMAc/WI (AWS) or AWMAc/WI (NAAWS), unless noted otherwise.
- B. Surface Burning Characteristics: Provide materials having fire and smoke properties as required by applicable code.
- C. Exterior Woodwork Items:
  - 1. Window Casings and Moldings: Hardwood and softwood as noted on drawings; prepare for paint finish.
  - 2. Soffits and Fascias: Prepare for paint finish.
  - 3. Enclosing Soffit Spaces: As detailed.
- D. Interior Woodwork Items:
  - 1. Moldings, Bases, Casings, and Miscellaneous Trim: Oak; prepare for Stained finish.
  - 2. Window Sills: Oak; prepare for Stained finish.
  - 3. Stairs, Balustrades, and Handrails: Oak; prepare for stained finish.

### **2.02 WOOD-BASED COMPONENTS**

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

### **2.03 LUMBER MATERIALS**

- A. Softwood Lumber: Douglas Fir species, Rough sawn, maximum moisture content of 6 percent; with vertical grain.
- B. Hardwood Lumber: Oak species, plain sawn, maximum moisture content of 6 percent; with vertical grain of quality suited for stained finish.

### **2.04 SHEET MATERIALS**

- A. Softwood Plywood, Not Exposed to View: Any face species, medium density fiberboard core; PS 1 Grade A-B, glue type as recommended for application.
- B. Hardwood Plywood: Face species as indicated, cut as indicated, veneer core; HPVA HP-1, Front Face Grade AA, Back Face Grade 1, glue type as recommended for application.

### **2.05 PLASTIC LAMINATE MATERIALS**

- A. Plastic Laminate: NEMA LD 3, HGS; color as selected by Architect; finish as selected.

### **2.06 FASTENINGS**

- A. Adhesive for Purposes Other Than Laminate Installation: Suitable for the purpose; not containing formaldehyde or other volatile organic compounds.

### **2.07 ACCESSORIES**

- A. Lumber for Shimming and Blocking: Softwood lumber of Douglas-fir species.
- B. Primer: Alkyd primer sealer.
- C. Wood Filler: Solvent base, tinted to match surface finish color.

### **2.08 WOOD TREATMENT**

- A. Factory-Treated Lumber: Comply with requirements of AWPA U1 - Use Category System for pressure impregnated wood treatments determined by use categories, expected service conditions, and specific applications.
- B. Fire Retardant Treatment (FR-S Type): Chemically treated and pressure impregnated; capable of providing flame spread index of 25, maximum, and smoke developed index of 450, maximum, when tested in accordance with ASTM E84.
- C. Wood Preservative by Pressure Treatment (PT Type): Provide AWPA U1 treatment using waterborne preservative with 0.25 percent retainage.
- D. Wood Preservative (Surface Application): Clear, \_\_\_\_\_ type, \_\_\_\_\_ manufactured by \_\_\_\_\_.

- E. Provide identification on fire retardant treated material.
- F. Redry wood after pressure treatment to maximum \_\_\_\_ percent moisture content.

## **2.09 FABRICATION**

- A. Shop assemble work for delivery to site, permitting passage through building openings.
- B. Cap exposed plastic laminate finish edges with material of same finish and pattern.
- C. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.
- D. Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.

## **2.10 SHOP FINISHING**

- A. Apply wood filler in exposed nail and screw indentations.
- B. Finish work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), Section 5 - Finishing for grade specified and as follows:
  - 1. Transparent:
    - a. Stain: As selected by Architect.
    - b. Sheen: Satin.
  - 2. Opaque:
    - a. System - 4, Latex Acrylic, Water-based.
    - b. Color: As selected by Architect.
    - c. Sheen: Satin.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify adequacy of backing and support framing.
- B. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.

### **3.02 INSTALLATION**

- A. Install work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade indicated.
- B. Set and secure materials and components in place, plumb and level.
- C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim to conceal larger gaps.

### **3.03 SITE APPLIED WOOD TREATMENT**

- A. Apply preservative treatment in accordance with manufacturer's instructions.
- B. Brush apply one coats of preservative treatment on wood in contact with cementitious materials. Treat site-sawn cuts.
- C. Allow preservative to dry prior to erecting members.

### **3.04 PREPARATION FOR SITE FINISHING**

- A. Set exposed fasteners. Apply wood filler in exposed fastener indentations. Sand work smooth.
- B. Site Finishing: See Section 09 9113 and 09 9123.
- C. Before installation, prime paint surfaces of items or assemblies to be in contact with cementitious materials.

### **3.05 TOLERANCES**

- A. Maximum Variation from True Position: 1/16 inch.

B. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch.

**END OF SECTION**

**SECTION 06 4100**  
**ARCHITECTURAL WOOD CASEWORK**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Specially fabricated cabinet units.
- B. Countertops.
- C. Cabinet hardware.

**1.02 RELATED REQUIREMENTS**

- A. Section 06 1000 - Rough Carpentry: Support framing, grounds, and concealed blocking.

**1.03 REFERENCE STANDARDS**

- A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.
- B. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards, U.S. Version 3.0; 2016.
- C. BHMA A156.9 - American National Standard for Cabinet Hardware; 2015.
- D. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.
- E. UL (DIR) - Online Certifications Directory; current listings at database.ul.com.

**1.04 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.
  - 1. Scale of Drawings: 1/2 inch to 1 foot, minimum.
- C. Product Data: Provide data for hardware accessories.
- D. Samples: Submit actual samples of architectural cabinet construction, minimum 12 inches square, illustrating proposed cabinet, countertop, and shelf unit substrate and finish.
- E. Samples: Submit actual sample items of proposed pulls, hinges, shelf standards, and locksets, demonstrating hardware design, quality, and finish.

**1.05 QUALITY ASSURANCE**

- A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.

**1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Protect units from moisture damage.

**1.07 FIELD CONDITIONS**

- A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

**PART 2 PRODUCTS**

**2.01 CABINETS**

- A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
- B. Plastic Laminate Faced Cabinets: Custom grade.
- C. Cabinets:
  - 1. Finish - Exposed Exterior Surfaces: Decorative laminate.
  - 2. Finish - Exposed Interior Surfaces: Decorative laminate.
  - 3. Finish - Semi-Exposed Surfaces: Decorative laminate
  - 4. Finish - Concealed Surfaces: Manufacturer's option.

5. Door and Drawer Front Edge Profiles: Lipped edge with inset band.
6. Door and Drawer Front Retention Profiles: Fixed panel.
7. Casework Construction Type: Type A - Frameless.
8. Interface Style for Cabinet and Door: Style 1 - Overlay; reveal overlay.
9. Adjustable Shelf Loading: 50 lbs. per sq. ft.
10. Cabinet Style: Reveal overlay.
11. Cabinet Doors and Drawer Fronts: Stile and rail, raised panel style.
12. Drawer Side Construction: Manufacturer's option.
13. Drawer Construction Technique: As recommended by fabricator.

## **2.02 WOOD-BASED COMPONENTS**

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

## **2.03 LAMINATE MATERIALS**

- A. High Pressure Decorative Laminate (HPDL): NEMA LD 3, types as recommended for specific applications.
- B. Provide specific types as indicated.
  1. Post-Formed Horizontal Surfaces: HGP, 0.039 inch nominal thickness, finish as indicated.

## **2.04 COUNTERTOPS**

- A. Plastic Laminate Countertops: Medium density fiberboard substrate covered with HPDL, post-formed, with bullnose edge.

## **2.05 ACCESSORIES**

- A. Adhesive: Type recommended by fabricator to suit application.
- B. Grommets: Standard plastic grommets for cut-outs, in color to match adjacent surface.

## **2.06 HARDWARE**

- A. Hardware: BHMA A156.9, types as recommended by fabricator for quality grade specified.
- B. Adjustable Shelf Supports: Standard side-mounted system using recessed metal shelf standards or multiple holes for pin supports and coordinated self rests, polished chrome finish, for nominal 1 inch spacing adjustments.
- C. Drawer and Door Pulls: "U" shaped wire pull, steel with chrome finish, 4 inch centers.
- D. Drawer Slides:
  1. Type: Full extension with overtravel.
  2. Static Load Capacity: Heavy Duty grade.
  3. Mounting: Side mounted.
  4. Stops: Integral type.
- E. Hinges: European style concealed self-closing type, steel with polished finish.

## **2.07 SHOP TREATMENT OF WOOD MATERIALS**

- A. Provide UL (DIR) listed and approved identification on fire retardant treated material.
- B. Deliver fire retardant treated materials cut to required sizes. Minimize field cutting.

## **2.08 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.
- 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. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.



1. Cap exposed plastic laminate finish edges with material of same finish and pattern.
- E. Mechanically fasten back splash to countertops as recommended by laminate manufacturer at 16 inches on center.
- F. Provide cutouts for inserts. Verify locations of cutouts from on-site dimensions. Prime paint cut edges.

### **PART 3 EXECUTION**

#### **3.01 EXAMINATION**

- A. Verify adequacy of backing and support framing.

#### **3.02 INSTALLATION**

- A. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.
- B. Use fixture attachments in concealed locations for wall mounted components.
- C. Use concealed joint fasteners to align and secure adjoining cabinet units.
- D. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.
- E. Secure cabinets to floor using appropriate angles and anchorages.
- F. Countersink anchorage devices at exposed locations. Conceal with solid wood plugs of species to match surrounding wood; finish flush with surrounding surfaces.

#### **3.03 ADJUSTING**

- A. Test installed work for rigidity and ability to support loads.
- B. Adjust moving or operating parts to function smoothly and correctly.

#### **3.04 CLEANING**

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

**END OF SECTION**

**SECTION 06 6100**  
**SIMULATED STONE FABRICATIONS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Cast plastic washroom vanities and washroom vanities with integral sink.

**1.02 RELATED REQUIREMENTS**

- A. Section 12 3600 - Countertops: Solid surfacing countertops.

**1.03 REFERENCE STANDARDS**

- A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2016.

**1.04 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate dimensions, thicknesses, required clearances, tolerances, materials, colors, finishes, fabrication details, field jointing, adjacent construction, design load parameters, methods of support, integration of plumbing components, and anchorages.
- C. Product Data: Provide data on specified component products, electrical characteristics and connection requirements.
- D. Samples: Submit two samples representative of vanity top, 4x4 inch in size, illustrating color, texture, and finish.
- E. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
- F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.

**1.05 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

**1.06 WARRANTY**

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.

**PART 2 PRODUCTS**

**2.01 MATERIALS**

- A. Provide finished products having flame spread index of 35 and smoke developed index of 15, when tested in accordance with ASTM E84 in thickness of 3/4 inch.
- B. Resin: Proprietary type, with integral coloring, stain resistant to domestic chemicals and cleaners.
- C. Core Framing: Softwood lumber, clear and free of knots.

**2.02 FABRICATION**

- A. Design vanity items with sufficient strength for handling and placement stresses.
- B. Radius corners and edges.

**2.03 FINISH**

- A. Color: linen color as selected.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

- A. Verify that field measurements are as indicated.
- B. Verify that joint preparation and affected dimensions are acceptable.

- C. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.

**3.02 PREPARATION**

- A. Provide anchoring devices for installation .
- B. Provide templates and rough-in measurements.

**3.03 INSTALLATION**

- A. Install components in accordance with shop drawings and manufacturer's instructions.
- B. Align work plumb and level.
- C. Rigidly anchor to substrate to prevent misalignment.

**3.04 TOLERANCES**

- A. Maximum Variation From True Dimension: 1/8 inch.
- B. Maximum Offset From True Position: 1/8 inch.

**3.05 CLEANING**

- A. Clean and polish surfaces in accordance with manufacturer's instructions.

**3.06 PROTECTION**

- A. Do not permit construction near unprotected surfaces.

**END OF SECTION**