

SECTION 06100 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Wood supports.
2. Wood blocking.
3. Wood cants.
4. Wood nailers.
5. Wood furring.
6. Wood grounds.
7. Wood underlayment.
8. Plywood backing panels.
9. Building wrap.

1.2 SUBMITTALS

A. Product Data: For each type of process and factory-fabricated product indicated.

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

B. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where subparagraph titles below introduce lists, the following requirements apply for product selection:

1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the manufacturers specified.
2. Manufacturers: Subject to compliance with requirements, provide products by the manufacturers specified.

2.2 WOOD PRODUCTS, GENERAL

A. Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.

1. Factory mark each piece of lumber with grade stamp of grading agency.
2. For exposed lumber indicated to receive stained or natural finish, mark grade stamp on end or back of each piece.
3. Provide dressed lumber, S4S, unless otherwise indicated.
4. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.

R.G. KREUSLER PARK RESTROOM BUILDING
AND ENTRY DRIVE MODIFICATIONS - #14204
Specifications

B. Wood Structural Panels:

1. Plywood: DOC PS 1, unless otherwise indicated.
2. Oriented Strand Board: DOC PS 2.
3. Comply with "Code Plus" provisions in APA Form No. E30K, "APA Design/Construction Guide: Residential & Commercial."

2.3 WOOD-PRESERVATIVE-TREATED MATERIALS

- A. Preservative Treatment by Pressure Process: AWPA C2 (lumber) and AWPA C9 (plywood), except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated according to AWPA C31 with inorganic boron (SBX).
- B. Kiln-dry material after treatment to a maximum moisture content of 19 percent for lumber.
- C. Mark each treated item with treatment quality mark of an inspection agency approved by the American Lumber Standards Committee Board of Review.
- D. Application: Treat items indicated on Drawings, and the following:
 1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
 2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.
 3. Wood framing members less than 18 inches above grade.
 4. Wood floor plates that are installed over concrete slabs directly in contact with earth.

2.4 FIRE-RETARDANT-TREATED MATERIALS

- A. General: Where fire-retardant-treated materials are indicated, provide materials that comply with performance requirements in [AWPA C20 (lumber)] [and] [AWPA C27 (plywood)]. Identify fire-retardant-treated wood with appropriate classification marking of UL, U.S. Testing, Timber Products Inspection, or another testing and inspecting agency acceptable to authorities having jurisdiction.
 1. Use treatment for which chemical manufacturer publishes physical properties of treated wood after exposure to elevated temperatures, when tested by a qualified independent testing agency according to ASTM D 5664, for lumber and ASTM D 5516, for plywood.
 2. Use treatment that does not promote corrosion of metal fasteners.
 3. Use Exterior type for exterior locations and where indicated.

2.5 DIMENSION LUMBER

- A. General: Of grades indicated according to the American Lumber Standards Committee National Grading Rule provisions of the grading agency indicated.
- B. Framing Other Than Non-Load-Bearing Partitions: Construction or No. 2 grade and any of the following species:

R.G. KREUSLER PARK RESTROOM BUILDING
AND ENTRY DRIVE MODIFICATIONS - #14204
Specifications

1. Douglas fir-larch, Douglas fir-larch (north), or Douglas fir-south; NLGA, WCLIB, or WWPA.
 2. Hem-fir or Hem-fir (north); NLGA, WCLIB, or WWPA.
 3. Southern pine; SPIB.
- C. Framing Other Than Non-Load-Bearing Partitions: Any species of machine stress-rated dimension lumber with a grade of not less than 2400f-2.0E
- D. Framing Other Than Non-Load-Bearing Partitions: Any species and grade with a modulus of elasticity of at least 1,300,000 psi and an extreme fiber stress in bending of at least 850 psi for 2-inch nominal thickness and 12-inch nominal width for single-member use.
- E. Exposed Framing: Hand select material for uniformity of appearance and freedom from characteristics that would impair finish appearance.
1. Species and Grade: As indicated above for load-bearing construction of same type.
 2. Species and Grade: Hem-fir or Hem-fir (north), Select Structural grade; NLGA, WCLIB, or WWPA.
 3. Species and Grade: Southern pine, No. 1 grade; SPIB.
 4. Species and Grade: Spruce-pine-fir or Spruce-pine-fir (south), No. 1 grade; NELMA, NLGA, WCLIB, or WWPA.

2.6 MISCELLANEOUS LUMBER

- A. Provide miscellaneous lumber for support or attachment of other construction, including the following:
1. Rooftop equipment bases and support curbs.
 2. Blocking.
 3. Cants.
 4. Nailers.
 5. Grounds.
- B. For items of dimension lumber size, provide Construction, Stud, or No. 2 grade lumber with 15 percent maximum moisture content of any species.
- C. For concealed boards, provide lumber with 15 percent maximum moisture content and any of the following species and grades:
1. Mixed southern pine, No. 2 grade; SPIB.
 2. Eastern softwoods, No. 2 Common grade; NELMA.
 3. Northern species, No. 2 Common grade; NLGA.
 4. Western woods, Construction or No. 2 Common grade; WCLIB or WWPA.

2.7 SHEATHING

- A. Plywood Wall Sheathing: Exterior Exposure 1 sheathing.
- B. Oriented-Strand-Board Wall Sheathing: Exposure 1 sheathing.
- C. Oriented-Strand-Board Roof Sheathing: Exposure 1 sheathing.

R.G. KREUSLER PARK RESTROOM BUILDING
AND ENTRY DRIVE MODIFICATIONS - #14204
Specifications

2.8 MISCELLANEOUS MATERIALS

A. Fasteners:

1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
2. Power-Driven Fasteners: CABO NER-272.
3. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.

B. Building Paper: Asphalt-saturated organic felt complying with ASTM D 226, Type I (No. 15 asphalt felt), unperforated.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking, grounds, and similar supports to comply with requirements for attaching other construction.
- B. Apply field treatment complying with AWPA M4 to cut surfaces of preservative-treated lumber and plywood.
- C. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
1. CABO NER-272 for power-driven fasteners.
 2. Table 2306.1, "Fastening Schedule," in the Florida Building Code 2001.
- D. Use finishing nails for exposed work, unless otherwise indicated. Countersink nail heads and fill holes with wood filler.
- E. Framing Standard: Comply with AFPA's "Manual for Wood Frame Construction," unless otherwise indicated.
- F. Framing with Engineered Wood Products: Install engineered wood products to comply with manufacturer's written instructions.
- G. Comply with applicable recommendations contained in APA Form No. E30K, "APA Design/Construction Guide: Residential & Commercial," for types of structural-use panels and applications indicated.
1. Comply with "Code Plus" provisions in above-referenced guide.
- H. Fastening Methods: Sheathing: Nail to wood framing.
- I. Apply building paper horizontally with 2-inch overlap and 6-inch end lap; fasten to sheathing with galvanized staples or roofing nails. Cover upstanding flashing with 4-inch overlap.

Building Wrap Application: Cover wall sheathing with building wrap as indicated. Cover upstanding flashing with 4-inch overlap. Seal seams, edges, and penetrations with tape.

END OF SECTION 06100

R.G. KREUSLER PARK RESTROOM BUILDING
AND ENTRY DRIVE MODIFICATIONS - #14204
Specifications

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes interior woodwork including for the following applications:
1. Plastic-laminate cabinets.
 2. Solid surface countertops.
 3. Plastic-laminate countertops.
- B. Interior architectural woodwork includes wood furring, blocking, shims, and hanging strips, unless concealed within other construction before woodwork installation.
- C. Rough carriages for stairs are interior architectural woodwork.
1. See Division 6, Section "Rough Carpentry" for platform framing.
 2. See Division 8, Section "Flush Wood Doors" for doors specified by reference to architectural woodwork standards.
 3. See Division 9 Section "Painting" for field finishing of installed interior architectural woodwork scheduled for opaque finish.

1.2 SUBMITTALS

- A. Product Data: For the following:
1. Cabinet hardware and accessories.
 2. Finishing materials and processes.
- B. Shop Drawings: Include location of each item, plans and elevations, large-scale details, attachment devices, and other components.
- C. Samples:
1. Lumber and panel products with shop-applied opaque finish, for each finish system and color, with exposed surface finished.
 2. Plastic-laminate-clad panel products, for each type, color, pattern, and surface finish.
 3. Thermoset decorative-overlay surfaced panel products, for each type, color, pattern, and surface finish.
- D. *VOC data:*
1. *Adhesives:*
 - a. *Submit manufacturer's product data for adhesives. Indicate VOC limits of the product. Submit MSDS highlighting VOC limits.*
 - b. *Submit Green Seal Certification to GS-36 and description of the basis for certification.*

R.G. KREUSLER PARK RESTROOM BUILDING
AND ENTRY DRIVE MODIFICATIONS - #14204
Specifications

2. *Engineered Wood Products: Provide documentation that composite wood and agrifiber products contain no added urea-formaldehyde resins*
 - a. *ANSI A208.1 – 1999, Particleboard*
 - b. *ANSI A208.2 – 2002, Medium Density Fiberboard (MDF) for Interior Applications*

E. *Submit environmental data in accordance with Table 1 of ASTM E2129 for products provided under work of this section.*

1.3 QUALITY ASSURANCE

A. Installer Qualifications: Fabricator of woodwork.

B. Quality Standard: Unless otherwise indicated, comply with AWI's "Architectural Woodwork Quality Standards" for grades of interior architectural woodwork, construction, finishes, and other requirements.

1. Provide AWI certification labels or compliance certificate indicating that woodwork complies with requirements of grades specified.

C. *VOC emissions: Provide low VOC products.*

1. *Adhesives and sealants: Comply with California's South Coast Air Quality Management (SCAQMD) #1168.*
2. *Aerosol adhesives: Comply with Green Seal GS-36*
3. *Clear wood finishes: Comply with SCAQMDA #1113*
4. *Engineered Wood Products:*
 - a. *Determine formaldehyde concentrations in air from wood products under test conditions of temperature and relative humidity in accordance with ASTM D6007 or E1333.*
 - b. *Determine Volatile Organic Compounds (VOC), excluding formaldehyde, emitted from manufactured wood-based panels in accordance with ASTM D6330.*

1.4 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at levels planned for building occupants during the remainder of the construction period.

PART 2 - PRODUCTS

2.1 WOODWORK FABRICATORS

A. Fabricators: Subject to compliance with requirements, provide interior architectural woodwork by one of the following:

1. KMI International Contacts, Lake Worth, FL.

R.G. KREUSLER PARK RESTROOM BUILDING
AND ENTRY DRIVE MODIFICATIONS - #14204
Specifications

2. Blumer and Stanton, Inc., West Palm Beach, FL.
3. Palm Beach Woodwork Co., Inc., West Palm Beach, FL.

2.2 MATERIALS

- A. Wood Products:
 1. Hardboard: AHA A135.4.
 2. 90Hardwood Plywood and Face Veneers: HPVA HP-1.
- B. Thermoset Decorative Overlay: Particleboard or medium-density fiberboard with surface of thermally fused, melamine-impregnated decorative paper complying with LMA SAT-1.
- C. High-Pressure Decorative Laminate: NEMA LD 3.
 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Formica Corporation.
 - b. Laminart.
 - c. Wilsonart International; Div. of Premark International, Inc.
3. Adhesive for Bounding Plastic Laminate: Contact cement.
4. Flamespread rating requirements of NFPA 101 for interior finish consistent with the occupancy requirement classification.

2.3 CABINET HARDWARE AND ACCESSORIES

- A. General: Provide cabinet hardware and accessory materials for a complete installation of architectural woodwork, except for items specified in Division 8 Section "Door Hardware."
- B. Hardware Standard: Comply with BHMA A156.9 for items indicated by referencing BHMA numbers or items referenced to this standard.
- C. Butt Hinges: 2-3/4-inch, 5-knuckle steel hinges made from 0.095-inch-thick metal
 1. Semiconcealed Hinges for Overlay Doors: BHMA A156.9, B01521, wrap-around type.
- D. Wire Pulls: Back mounted, 4 inches long, 5/16 inches in diameter.
- E. Catches: Magnetic, BHMA A156.9, B03141.
- F. Adjustable Shelf Standards and Supports: BHMA A156.9, B04071; with shelf rests, B04081.

R.G. KREUSLER PARK RESTROOM BUILDING
AND ENTRY DRIVE MODIFICATIONS - #14204
Specifications

- G. Drawer Slides: Side-mounted, full-extension, zinc-plated steel drawer slides with steel ball bearings, BHMA A156.9, B05091, and rated for the following loads:
 - 1. Drawer Slides: 100 lbf.
- H. Door Locks: BHMA A156.11, E07121.
- I. Drawer Locks: BHMA A156.11, E07041.
- J. Exposed Hardware Finishes: Complying with BHMA A156.18 for BHMA finish number indicated.
 - 1. Satin Chromium Plated: BHMA 626 for brass or bronze base; BHMA 652 for steel base.
- K. Grommets for cable passage through countertops: 1" OD black, molded-plastic grommets with $\frac{3}{4}$ " hole and black plastic cap with slot for wire passage.

2.4 INSTALLATION MATERIALS

- A. Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber, kiln-dried to less than 15 percent moisture content.

2.5 FABRICATION

- A. General: Complete fabrication to maximum extent possible before shipment to Project site. Where necessary for fitting at site, provide allowance for scribing, trimming, and fitting.
 - 1. Interior Woodwork Grade: Premium complying with the referenced quality standard.
 - 2. Shop cut openings to maximum extent possible. Sand edges of cutouts to remove splinters and burrs.
 - 3. For trim items wider than available lumber, use veneered construction. Do not glue for width.
 - 4. Backout or groove backs of flat trim members and kerf backs of other wide, flat members, except for members with ends exposed in finished work.
- B. Plastic-Laminate Cabinets:
 - 1. AWI Type of Cabinet Construction: Reveal overlay on face frame.
 - 2. WIC Construction Style: Style B, Face Frame.
 - 3. WIC Construction Type: Type II, single-length sections to fit access openings.
 - 4. WIC Door and Drawer Front Style: Reveal overlay.
 - 5. Reveal Dimension: 1/2 inch.
 - 6. Laminate Cladding for Exposed Surfaces: High-pressure decorative of grade indicated.
 - 7. Core Material for cabinets: $\frac{3}{4}$ " Thick plywood and $\frac{3}{4}$ " Thick Exterior-marine grade plywood (at wet areas).
 - a. Horizontal Surfaces Other Than Tops: HGL.
 - b. Postformed Surfaces: HGP.
 - c. Vertical Surfaces: HGS.
 - d. Edges: HGS tape, 0.018-inch minimum thickness, matching laminate in color, pattern, and finish.

R.G. KREUSLER PARK RESTROOM BUILDING
AND ENTRY DRIVE MODIFICATIONS - #14204
Specifications

8. Materials for Semiexposed Surfaces Other Than Drawer Bodies: Thermoset decorative overlay.
 - a. Drawer Sides and Backs: Thermoset decorative overlay.
 - b. Drawer Bottoms: Thermoset decorative overlay.
9. Colors, Patterns, and Finishes: As selected from manufacturer's full range.
10. Provide dust panels of 1/4-inch plywood or tempered hardboard above compartments and drawers, unless located directly under tops.

C. Solid Surface Countertops:

1. Corian – Solid surface by DuPont or approved equal.
2. Colors, Patterns, and Finishes: From Manufacturer's Standard Colors.
 - a. Restroom Countertops: Corian Tumbleweed.
 - b. Receiving, Break Room and Copy Room Casework top: Corian Doeskin.
3. Shop Drawings to indicate minimal material joints as possible.

2.6 SHOP FINISHING

- A. Finish architectural woodwork at fabrication shop. Defer only final touchup, cleaning, and polishing until after installation. Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing architectural woodwork, as applicable to each unit of work.
- B. Backpriming: Apply one coat of sealer or primer, compatible with finish coats, to concealed surfaces of woodwork. Concealed surfaces of plastic laminate-clad woodwork do not require backpriming when surfaced with plastic laminate or thermoset decorative overlay.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Condition woodwork to average prevailing humidity conditions in installation areas and examine and complete work as required, including removal of packing and backpriming before installation.
- B. Quality Standard: Install woodwork to comply with AWI Section 1700 for the same grade specified in this Section for type of woodwork involved.
- C. Quality Standard: Install woodwork to comply with WIC Section 26 for the same grade specified in this Section for type of woodwork involved.
- D. Install woodwork level, plumb, true, and straight to a tolerance of 1/8 inch in 96 inches. Shim as required with concealed shims.
- E. Scribe and cut woodwork to fit adjoining work, and refinish cut surfaces and repair damaged finish at cuts.

R.G. KREUSLER PARK RESTROOM BUILDING
AND ENTRY DRIVE MODIFICATIONS - #14204
Specifications

- F. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure with countersunk, concealed fasteners and blind nailing as required for complete installation. Use fine finishing nails or finishing screws for exposed fastening, countersunk and filled flush with woodwork and matching final finish if transparent finish is indicated.
- G. Cabinets: Install without distortion so doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation.
 - 1. Fasten wall cabinets through back, near top and bottom, at ends and not more than 16 inches o.c. with No. 10 wafer-head screws sized for 1-inch penetration into wood framing, blocking, or hanging strips.
- H. Countertops: Anchor securely by screwing through corner blocks of base cabinets or other supports into underside of countertop. Caulk space between backsplash and wall with sealant specified in Division 7 Section "Joint Sealants."

3.2 SITE ENVIRONMENTAL PROCEDURES

- A. *Indoor Air Quality: Provide temporary ventilation for work of this Section as specified in Section 01352: Indoor Air Quality (IAQ) Management.*
 - 1. *During and immediately after installation of prefabricated wood products, and laminated wood products at interior spaces, provide temporary ventilation.*

END OF SECTION 06402