

SECTION 06 10 53 - MISCELLANEOUS CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Miscellaneous framing with dimension lumber.
2. Wood blocking and nailers.
3. Wood furring.
4. Miscellaneous plywood, plywood backing panels and underlayment.
5. Roof Sheathing.
6. Wall sheathing.
7. Wood trim.
8. High density polyethylene sheet (HDPE) for freezer floor door threshold thermal break.
9. Solid-surfacing-material for window stools, wall caps, and countertops.

B. Refer to Division 22 Section "Commercial Plumbing Fixtures" for undermount stainless steel lavatories.

1.2 SUBMITTALS

A. Product Data: For fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements.

B. Samples: Solid-surfacing.

1.3 QUALITY ASSURANCE

A. Lumber Standard: DOC PS 20 and applicable rules of respective grading and inspecting agency for species and product as certified by ALSC Board of Review.

B. Plywood Standard: DOC PS 1 (ANSI A199.1) and, for products not manufactured under PS 1 provisions, with APA PRP-108 and applicable APA Performance Standard for type of panel required.

C. Grade Marks: Provide each unit of lumber and plywood mill marked with stamp containing symbol of grading agency certified by ALSC - Board of Review, mill number or name, grade designation, species designation, rules under which graded and condition of seasoning at time of manufacture. Omit marking from surfaces to be exposed in completed work with transparent finish or without finish.

D. Fire-Test-Response Characteristics: For assemblies with fire-resistance ratings, provide materials and construction identical to those of assemblies tested for fire resistance per

ASTM E119 by a testing and inspecting agency acceptable to authorities having jurisdiction over the Work.

1.4 WARRANTY

- A. Solid-Surfacing-Material: Provide manufacturers standard warranty against defects in materials. Warranty shall provide material only to repair or replace defective materials.
 - 1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. 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. Provide dressed lumber, S4S, unless otherwise indicated.

2.2 TREATED MATERIALS

- A. Application:
 - 1. Wood-Preservative-Treated Materials: Wood nailers on top of exterior parapet walls and other wood materials as indicated.
 - 2. Fire-Retardant-Treated Materials (FRT): As indicated in this Section and on Drawings.
- B. Wood-Preservative-Treated Materials
 - 1. Preservative Treatment by Pressure Process: AWPAC2 with preservative chemicals acceptable to authorities having jurisdiction and containing no arsenic or chromium.
 - 2. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or does not comply with requirements for untreated material.
 - 3. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- C. Fire-Retardant-Treated Materials
 - 1. General: Comply with performance requirements in AWPAC20 (lumber) and AWPAC27 (plywood).
 - 2. Type: Exterior.
 - 3. Flame Spread Rating: 25 or less
 - 4. Fuel Contributed Rating: 50 or less
 - 5. Smoke Developed Rating: 50 or less.
 - 6. Identify fire-retardant-treated wood with UL label and UL rating FR-S.

2.3 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including blocking, nailers, rooftop equipment bases and support curbs, and furring.
- B. For items of dimension lumber size, provide Standard, Stud, or No. 3 grade lumber with 19 percent maximum moisture content of any species.
- C. For concealed boards, provide lumber with 19 percent maximum moisture content.

2.4 SHEATHING

- A. Plywood Roof Sheathing: Exposure 1 sheathing, fire-retardant-treated, thickness as indicated on Drawings.
- B. Miscellaneous Plywood Wall Sheathing: Exposure 1 sheathing, thickness as indicated on Drawings.
 - 1. Provide fire-retardant-treated plywood as indicated on Drawings.
- C. Glass-Mat Gypsum Wall Sheathing: ASTM C 1177/1177M, thickness as indicated on Drawings.
 - 1. Products:
 - a. CertainTeed Corporation; SAINT-GOBAIN; GlasRoc.
 - b. G-P Gypsum Corporation; Dens-Glass Gold.
 - c. National Gypsum Company; eXP Sheathing.
 - d. USG Corporation; Securock.

2.5 INTERIOR WALL SHEATHING

- A. Oriented-Strand-Board (OSB): DOC PS 2, Exposure 1 sheathing.
- B. Plywood:
 - 1. Telephone and Electrical Equipment Backing Panels: DOC PS 1, Exposure 1, C-D Plugged, fire-retardant treated, 3/4-inch (19-mm) nominal thickness.
 - 2. Interior Walls: Exterior C-D grade, thickness as indicated on Drawings.
 - a. Provide fire retardant treat plywood as indicated on Drawings.

2.6 INTERIOR WOOD TRIM

- A. General: Provide kiln-dried finished (surfaced) material.
- B. Hardwood Lumber Trim for Transparent (Stain or Clear) Finish: Species as indicated on drawings.

- C. Lumber Trim for Opaque (Painted) Finish: Either finger-jointed or solid lumber.

2.7 HIGH DENSITY POLYETHYLENE SHEET (HDPE)

- A. Freezer Floor Door Threshold Thermal Break: "Sanilite" high density polyethylene sheet material.
 - 1. Basis-of-Design Manufacturer: U.S. Plastic Corp.
 - 2. Thickness: 1/2 inch (13 mm).
 - 3. Color: White.

2.8 SOLID-SURFACING-MATERIAL

- A. Solid-Surfacing-Material: Homogeneous solid sheets of filled plastic resin complying with ISSFA-2.
- B. Solid-Surfacing-Material Window Stools and Partial Height Wall Caps.
 - 1. Products:
 - a. Aristech Surfaces, LLC; Avonite Surfaces.
 - b. E.I. du Pont de Nemours & Co., Inc.; Corian.
 - c. Formica Corporation; Formica Solid Surfacing.
 - d. Swan Corporation; Swanstone.
 - e. Wilsonart, LLC.
 - 2. Thickness: Minimum 1/2 inch (13 mm).
 - 3. Edge Condition: Eased thick with edges eased.
 - 4. Color: Manufacturer's standard solid color as specified in Division 01 Section "Décor Interior Finishes and Colors."
- C. Solid-Surfacing-Material Countertops
 - 1. Product:
 - a. Aristech Surfaces, LLC; Avonite Surfaces.
 - b. E.I. du Pont de Nemours & Co., Inc.; Corian.
 - c. Formica Corporation; Formica Solid Surfacing.
 - d. Swan Corporation; Swanstone.
 - e. Wilsonart, LLC.
 - 2. Thickness: As indicated on Drawings or if not indicated as required to meet manufacturer's warranty.
 - 3. Color: As specified in Division 01 Section "Décor Interior Finishes and Colors."
 - 4. Fabricate tops in one piece, unless otherwise indicated. Comply with solid-surfacing-material manufacturer's written recommendations for adhesives, sealers, fabrication, and finishing and to the AWI/AWMAC/WI's "Architectural Woodwork Standards" for Custom Grade.

- a. Fabricate tops with shop-applied edges and integral backsplashes of materials and configuration indicated.
 - b. Form joints between components using manufacturer's standard joint adhesive without conspicuous joints.
 - c. Reinforce joints and corners with strip of solid polymer material, **2 inches (50 mm)** wide.
 - 1) Do not use any wood product for reinforcement of joints or corners.
 - d. Fabricate tops with loose sidesplashes for field application.
5. Drill holes in countertops for plumbing fittings in shop.

2.9 FASTENERS

- A. General: Where carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Power-Driven Fasteners: NES NER-272.
- C. Self-Drilling, Self-Tapping Screws:
 - 1. Basis of Design: Titelock No. 6 PL Screws; Milcor
- D. Screws for Fastening to Cold-Formed Metal Framing: ASTM C 954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for material being fastened.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- B. Comply with AWP A M4 for applying field treatment to cut surfaces of preservative-treated lumber.
- C. Securely attach carpentry work to substrates and supporting members using fasteners of size that will not penetrate members where opposite side will be exposed to view or receive finish materials. Install fasteners without splitting wood; fasten panel products to allow for expansion at joints, unless otherwise indicated.
- D. Plywood and OSB Installation: Comply with American Plywood Association recommendations for fabrication and installation, including joint spacing and fastening requirements.

1. Fasten plywood sheathing to metal substrates with self-drilling, self-tapping drywall screws.
 2. Attach plywood backing behind FRP panels with drywall screws to 10' above floor where indicated on drawings.
- E. Gypsum Sheathing Installation: Comply with GA-253 and with manufacturer's written instructions.
1. Install boards with a **3/8-inch (9.5-mm)** gap where non-load-bearing construction abuts structural elements. Install boards with a **1/4-inch (6.4-mm)** gap where they abut masonry or similar materials that might retain moisture, to prevent wicking.
 2. Apply fasteners so heads bear tightly against face of sheathing, but do not cut into facing.
- F. Wood Trim Installation: Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Cope at returns and miter at corners to produce tight-fitting joints with full-surface contact throughout length of joint. Use scarf joints for end-to-end joints.
1. Match color and grain pattern across joints.
 2. Install trim after gypsum board joint-finishing operations are completed.
 3. Install to tolerance of **1/8 inch in 96 inches (3 mm in 2438 mm)** for level and plumb. Install adjoining finish carpentry with **1/32-inch (0.8-mm)** maximum offset for flush installation and **1/16-inch (1.6-mm)** maximum offset for reveal installation.
- G. Solid-Surfacing-Material Installation:
1. Shop prime and seal concealed work with at least first coat specified in Division 09 Section "Painting." Machine and sand woodwork to comply with requirements of standards for specified grade.
 2. Scribe and cut work to fit adjoining work. Anchor tops securely to support systems. All joints should be supported by framing and specified slipsheet. Edges to be joined should be straight, smooth and clean.
 3. Make joints between adjacent horizontal sheets with manufacturer's standard adhesive.
 4. Make cutouts with router equipped with sharp **3/8 inch (9.5 mm)** minimum diameter carbide bit. Round corners of cutout and smooth edges top and bottom, all around cutout.
 5. Install stainless steel lavatories in solid-surfacing-material as specified in Division 22 Section "Commercial Plumbing Fixtures."
 6. Clearances between joints:
 - a. Uncaulked joints **1/32 inch (0.79 mm)** for every **8 feet (2438 mm)** length.
 - b. Caulked joints **1/8 inch (3 mm)** wide to allow satisfactory sealant penetration and expansion.
 7. Clean solid-surfacing-material using conventional cleaning techniques; do not use acid cleaners. Remove stains or cigarette burns with abrasive cleansers that cannot be removed with soap and water.

END OF SECTION 06 10 53