

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. Wall sheathing.
6. Wood trim.

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.

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 and Quartz-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: AWPA C2 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 AWPA C20 (lumber) and AWPA C27 (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 CART CORRAL CURB BUMPERS

- A. Plastic Lumber: Solid shapes made from 100 percent recyclable high density polyethylene (HDPE) and impregnated with colorant and UVI.
1. Products:
 - a. Tangent Technologies, LLC; Molded Lumber.
 - b. J-Mac Lumber, Inc.; Commercial Plastic Lumber.
 - c. Plastic Lumber Yard, LLC.; Premium.
 - d. RENEW Plastics, LLC; EVOLVE.
 2. Surface-Burning Characteristics: As follows when tested by a qualified testing agency according to ASTM E84. Identify products with appropriate markings of applicable testing agency.
 - a. Flame-Spread Index: 60 or less.
 - b. Smoke-Developed Index: 250 or less.
 3. Thickness: 1 to 1-1/4 inches (25 to 32 mm).
 4. Width: 11-1/4 to 12 inches (286 to 305 mm).
 5. Profile: Beveled top edge as indicated on Drawings either factory or field fabricated.
 6. Surface Texture: Smooth.
 7. Color: Black unless otherwise indicated.

2.5 SHEATHING

Retain option below only when the store's construction is selected to be 2B noncombustible or as required by authorities having jurisdiction.

- 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.

Retain "Sealant for Glass-Mat Gypsum Sheathing" paragraph and associated subparagraphs below if sheathing is behind exterior insulation and finish system or if not specifying a plastic sheet air barrier (Tyvek) over the glass-mat gypsum sheathing. Never specify both sealant and plastic sheet air barrier on the same surface.

2. Sealant for Glass-Mat Gypsum Sheathing: Silicone emulsion sealant complying with ASTM C 834, compatible with sheathing tape and sheathing and recommended by tape and sheathing manufacturers for use with glass-fiber sheathing tape and for covering exposed fasteners.
 - a. Sheathing Tape: Self-adhering glass-fiber tape, minimum 2 inches (50 mm) wide, 10 by 10 or 10 by 20 threads/inch (390 by 390 or 390 by 780 threads/m), of type recommended by sheathing and tape manufacturers for use with silicone emulsion sealant in sealing joints in glass-mat gypsum sheathing and with a history of successful in-service use.

2.6 INTERIOR WALL SHEATHING

Typically use OSB wall sheathing for backroom and dock interior stud wall protection. Select fire-retardant treated plywood wall panels when required by authority having jurisdiction.

Indicate thickness of OSB wall panels on Drawings.

- 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.

Indicate thickness of plywood wall panels on Drawings.

2. Interior Walls: Exterior C-D grade, thickness as indicated on Drawings.
 - a. Provide fire retardant treat plywood as indicated on Drawings.

2.7 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.

2.8 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.

2.9 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.

Select first option below for Neighborhood, Neighborhood-Ralphs, and Banner Decors. Select second option for Artisan and Urban Mix Decors.

4. Color: Manufacturer's standard solid color as specified in Division 01 Section ["**General Interior Finishes and Colors.**"] ["**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.

Select first option below for Neighborhood, Neighborhood-Ralphs, and Banner Decors. Select second option for Artisan and Urban Mix Decors.

3. Color: As specified in Division 01 Section ["**General Interior Finishes and Colors.**"] ["**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.

Typically delete article below. Quartz surfacing material is not currently used in stores.

2.10 QUARTZ-SURFACING-MATERIAL

A. Manufacturers

1. Cambria.
2. Cosentino North America; C&C North America, Inc.
3. E. I. du Pont de Nemours and Company ; Corian Quartz.
4. Wilsonart, LLC.

B. Material: Homogeneous mixture containing 93 percent pure quartz with additions of high performance polyester resin, pigments and special effects.

1. Thickness: 1-inch (25 mm).
2. Color: As specified in Division 01 Section "Décor Interior Finishes and Colors."
3. Finish: Smooth.
4. Exposed Edges and Corners: Smooth.

C. Accessories

1. Mounting Adhesive: Structural grade silicone or epoxy adhesive
2. Quartz Surface Adhesive: Epoxy or polyester adhesive as recommended by manufacturer.
3. Solvent: Denatured alcohol for cleaning quartz surfacing.
4. Cleaning Agents: Mild soap and water.

D. Fabrication

1. Layout and fabricate with 'hairline' joints.
2. Where edges will be exposed in finished work; polish edges.
3. Laminate layers of quartz surfacing as required to create built up edges.

2.11 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 AWPAM4 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.

Retain paragraph and associated subparagraph below if sheathing is behind exterior insulation and finish system or if not specifying a plastic sheet air barrier (Tyvek) over the glass-mat gypsum sheathing. Never specify both sealant and plastic sheet air barrier on the same surface.

3. Seal sheathing joints according to sheathing manufacturer's [and EIFS manufacturer's] written instructions.
 - a. Apply glass-fiber sheathing tape to glass-mat gypsum sheathing joints and apply and trowel silicone emulsion sealant to embed entire face of tape in sealant. Apply sealant to exposed fasteners with a trowel so fasteners are completely covered. Seal other penetrations and openings.
- 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. Cart Corral Curb Bumper Installation:
 1. Install curb bumpers as indicated on Drawings with Tapcons or concrete expansion anchors top and bottom at no more than **36 inches (915 mm)** o.c. Recess heads of bolts flush with outer surface of bumper.
 2. Provide 45-degree bevel on top edge of bumper as indicated on Drawings. Bevel may be factory fabricated.
- H. 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.

Typically delete paragraph below. Quartz surfacing material is not currently used in stores.

I. Quartz-Surfacing Installation

1. General: Install materials in accordance with manufacturer's instructions and approved shop drawings.
2. Preliminary Installation:
 - a. Position materials to verify the correct size.
 - b. If size adjustments, or additional fabrication is necessary, use water cooled tools. Protect jobsite and surface from dust and water.
 - c. Allow gaps for expansion of not less than 1/8 inch (1.5mm) per ten feet when installed between walls or other fixed structure.
3. Permanent Installation:
 - a. After verification of fit and finish, clean substrate; remove loose and foreign matter which may interfere with adhesion. Clean quartz surface backside and joints with denatured alcohol.
 - b. Horizontal surface: Apply continuous bead of mounting adhesive around perimeter of structural substrate and supports.
 - c. Install quartz surfacing plumb, level, square and flat to within 1/8 inch in ten feet.
 - d. Joints:
 - 1) Securely join adjacent pieces with two-part acrylic adhesive.
 - 2) Fill joints level to polished surface.
 - 3) Secure adjacent quartz surfaces with vacuum clamps until adhesive hardens.

END OF SECTION 06 10 53

BLANK SHEET