



Cherry Creek School District Technical Guidelines - 2020

DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES

06 10 00 – ROUGH CARPENTRY

PART 1 - GENERAL

- A. Summary - Section Includes:
 - 1. Wood framing and blocking.
 - 2. Rough hardware.
 - 3. Plywood sheathing.

- B. Referenced Standards/Minimum Criteria:
 - 1. Wood Framing: Comply with requirements of International Building Code and "National Design Specification for Wood Construction", latest edition, as published by National Forest Products Association.
 - 2. Lumber: Comply with Standard Grading Rules for Western Lumber, latest edition, published by Western Wood Products Association. Each piece of lumber shall be grade stamped.
 - 3. Plywood: Comply with U.S. Product Standard PS 1 for Softwood Plywood/Construction and Industrial. Each panel shall be identified with the grade trademark of the American Plywood Association.
 - 4. Treated Wood: Comply with Standards of the American Wood Protection Association (AWPA). Fire treatment per AWPA Standards U1 and T1. For preservative treatment, conform to AWPA Standard U1.

- C. Submittals Required:
 - 1. Product data for fire retardant treated lumber and plywood.

- D. Restrictions/Critical Criteria:
 - 1. Framing lumber and plywood sheathing on the interior of the building, not required to be preservative treated, shall be fire retardant treated, Class A Fire Rated with a flame spread of 25 or less.
 - 2. Framing lumber and plywood sheathing in contact with roof membrane or on the exterior of the building shall be pressure impregnated with fire retardant with a Class A fire rating.
 - 3. Framing: Framing for all portions of the work shall be performed in substantial manner consistent with accepted standards of the carpentry trade. Erect framing plumb, level and true, and rigidly anchor in place. Locate studs 16-inches on center except where indicated otherwise.
 - 4. Plywood Sheathing: Install sheathing panels with face grain across supports. End joints shall occur over supports with end joints staggered. Properly support plywood panels around cutouts and openings.



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5. Install blocking or plywood in stud space behind gypsum board partitions for attachment of wall stops, cabinets, and other wall mounted accessories. Contractor shall verify mounting requirements of cabinets and accessories to ensure adequate blocking is provided within partitions.
6. Provide continuous fire-retardant treated 3/4-inch plywood or OSB continuous lumber blocking at all mounting locations including but not limited to:
 - a. Handrails and guardrails
 - b. Door stops
 - c. Hold opens
 - d. Grab bars
 - e. Architectural specialties
 - f. Plumbing fixtures
 - g. Toilet accessories
 - h. Luminaires (wall mounted)
 - i. Surface mounted devices
 - j. Casework and shelving (wall and base cabinets at the top of each unit)
 - k. Industrial shelving
 - l. Markerboards and tackboards
 - m. Projection screens
 - 1) Indicate on the drawings the mounting heights for projection screen blocking.
 - n. Wall-mounted door holders (magnetic and mechanical)
 - o. Miscellaneous equipment
 - p. All other surface-mounted items as required for proper anchorage
 - q. Coordinate with the library furnishings planner and supplier (separate contract through CCSD) so that blocking is installed by the General Contractor for all shelving and custom casework provided under the Library Furnishings Contract.

PART 2 - PRODUCTS

- A. Acceptable Products:
 1. Rough Hardware: Provide necessary bolts, screws, nails, clips, plates, straps, hangers, etc., required for the completion of rough carpentry. Hardware shall be correct material of proper size and strength for the purpose intended and shall conform to the requirements of all applicable building codes. Exterior hardware items embedded in concrete or masonry shall be galvanized. Anchor bolts indicated to be built into concrete for support of wood framing shall be provided under this Section and installed under Division 03 Sections "Concrete Formwork" and "Cast-in-place Concrete".
 2. Framing Lumber: (Non-Fire Rated)
 - a. Studs: Hem-Fir, Stud Grade or Construction Grade.
 - b. Plates: Hem-Fir, Standard Grade or better.
 - c. Joists and Headers: Hem-Fir, No. 2 Grade or better.
 - d. Blocking and Furring: Hem-Fir, Standard Grade or better.
 - e. Roof and Wall Plywood Sheathing: Exterior sheathing with exterior glue.
 - f. Equipment mounting boards, B-C Grade.



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3. Framing Lumber and Plywood (Fire Rated)
 - a. "Exterior Fire-X" by Hoover Treated Wood Products: www.frtw.com.
 - b. Approved substitute.
4. Interior framing lumber and plywood (Fire Rated):
 - a. "Pyro-Guard" by Hoover Treated Wood Products: www.frtw.com.
 - b. "DRICON" by Lonza Wood Protection: www.wolmanizedwood.com.
 - c. "FlamePro Fire Retardant Treated Wood" by Koppers Performance Chemicals: www.koppersperformancechemicals.com.

06 20 00 – INTERIOR FINISH CARPENTRY

PART 1 - GENERAL

- A. Summary - Section Includes:
 1. Millwork items including but not limited to interior wood trim.
- B. Referenced Standards/Minimum Criteria:
 1. Conform to the requirements of "Architectural Woodwork Standards", latest edition, as published by the Architectural Woodwork Institute: www.awinet.org.
 2. Conform to requirements of the National Particleboard Association (NPA): www.compositepanel.org.
- C. Submittals Required:
 1. Shop drawings.
- D. Restrictions/Critical Criteria:
 1. Trim materials shall be free of all defects to the extent required by AWI Custom Grade, allowed for the species used.
 2. Wherever possible, each length of finish trim shall be in single piece. No butt joints will be allowed except for long pieces which may be in two or more sections.
 3. Install trim level, plumb and true, and tightly secure to backing with nails, screws, or glue. Blind nail wherever possible. Where surface nailing is necessary, use finish nails.

PART 2 - PRODUCTS

- A. Acceptable Materials:
 1. Interior Trim: Painted: Select kiln-dried sugar pine or Idaho white pine.
 2. Interior Trim: Painted: Select kiln-dried red or white birch.
 3. Interior Trim: Natural Finish: Select kiln-dried straight grain clear red oak or white birch.



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06 40 00 – ARCHITECTURAL WOODWORK

PART 1 - GENERAL

- A. Summary - Section Includes:
 - 1. Custom cabinets and countertops (usually lavatory counters, library circulation desk, etc.).
 - 2. Shelving.
 - 3. Windowsills.
 - 4. Display cases.
 - 5. Coat boxes at elementary schools.
- B. Referenced Standards/Minimum Criteria:
 - 1. Architectural Woodwork Institute (AWI) "Architectural Woodwork Standards," latest edition.
- C. Submittals Required:
 - 1. Shop drawings.
 - 2. Product data.
 - 3. Color options (full range) for plastic laminate and PVC edging.
- D. Restrictions/Critical Criteria:
 - 1. Use 3 mm PVC edging for door and drawer front edges and front edge of windowsills.
 - 2. Use 3 mm PVC edging for all front and backsplash edges of countertops.
 - 3. Use 1mm PVC edging for cabinet body edges and coat-box edges.
 - 4. All countertops 1.125-inch thick medium density particleboard - with 0.050-inch plastic laminate top and backer sheet on underside of countertop.
 - 5. Maximum span for wood or plastic laminate covered shelves is 36-inches between shelf standards.
 - 6. Provide locks on all drawers and doors. Verify extent of locks on cabinet doors in elementary schools with School District.

PART 2 - PRODUCTS

- A. Acceptable Plastic Laminate Manufacturers:
 - 1. Formica: www.formica.com.
 - 2. Wilsonart: www.wilsonart.com.
 - 3. Nevamar: www.nevamar.com.
 - 4. Laminart: www.laminart.com.
 - 5. Approved substitute.
- B. Acceptable Trim Materials:
 - 1. Pine: Select kiln-dried sugar pine or Idaho white pine, C Select or better.
 - 2. Birch: Select kiln-dried or white birch.
 - 3. Red Oak: Select kiln-dried straight grain clear red oak.



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- C. Acceptable Plywood Materials:
 - 1. Premium Grade plain sliced red oak or white birch with face veneers per HPVA Grade A.

- D. Acceptable Materials - Plastic Laminate Faced Casework:
 - 1. Exposed Surfaces (including inside surfaces of open shelving units): Vertical Grade, High Pressure Decorative Laminate 0.030-inch thick.
 - 2. Semi-Exposed (backs of doors and inside surfaces of cabinets with doors): Melamine Laminate, 0.020-inches thick. Cabinet liner type. Painted surfaces not acceptable.
 - 3. Concealed Surfaces: Melamine Laminate, 0.020-inch thick, liner or backer type.

- E. Hardware:
 - 1. Use same hardware as specified in Division 12 Section "Plastic Laminate Faced Casework".

06 66 40 – SOLID SURFACING MATERIAL FABRICATIONS

PART 1 - GENERAL

- A. Summary - Section includes:
 - 1. Solid surface material countertops and windowsills.

- B. Referenced Standards/Minimum Criteria:
 - 1. ASTM D 256-18 "Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics".
 - 2. ASTM D570-18 "Standard Test Method for Water Absorption of Plastics".
 - 3. ASTM D638-14 "Standard Test Method for Tensile Properties of Plastics".
 - 4. ASTM D696-16 "Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30 degrees C and 30 degrees C with a Vitreous Silica Dilatometer".
 - 5. ASTM D790-17 "Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials".
 - 6. ASTM D1499-13 "Standard Practice for Operating Light- and Water-Exposure Apparatus (Carbon-Arc Type) for Exposure of Plastics".
 - 7. ASTM D5420-16 "Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by Means of a Striker Impacted by a Falling Weight (Gardner Impact) ".
 - 8. ASTM E84-20 "Standard Test Method for Surface Burning Characteristics of Building Materials".
 - 9. ASTM G21-15 "Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi".

- C. Submittals Required:
 - 1. Product data.
 - 2. Shop drawings.
 - 3. Samples for color selection.



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- D. Restrictions/Critical Criteria:
1. Solid Polymer Material: Homogeneous filled acrylic meeting ANSI Z124.3 and Z124.6, Type Six, and FS WW-P-541E/GEN (1); not coated, laminated, or of composite construction.
 2. Surface Burning Characteristics: Flame spread index of 25, smoke developed index of 30; when tested in accordance with ASTM E 84 (Class I).
 3. Countertops: Horizontal surfaces of solid polymer material, minimum 1/2-inch (3 cm) with built-up edge to 1-1/2-inch thickness; adhesively joined with inconspicuous seams.
 - a. Colors: As selected from manufacturer's full range.
 - b. Indicate edge and corner detail.
 4. Windowsills: Horizontal surfaces of solid polymer material, minimum 1/2-inch with built-up edge to 1-inch thickness; adhesively joined with inconspicuous seams.
 - a. Colors: As selected from manufacturer's full range.
 - b. Indicate edge and corner detail.
 5. Finish: Uniform on all surfaces.
 - a. Matte: Gloss rating of 5-20.

PART 2 - PRODUCTS

- A. Acceptable Manufacturers/Products:
1. "Hi-Macs" as manufactured by LG Hausys: www.lghimacusa.com.
 2. Avonite Surfaces: www.avonitesurfaces.com.
 3. DuPont Corp. www.corian.com.
 4. Formica Solid Surfacing: www.formica.com.

END OF SECTION