

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

1. Drawings and general provisions of Contract, including General Conditions and Division 1 Specification sections, apply to work of this section.

1.02 DESCRIPTION OF WORK

1. Extent of each type of architectural woodwork is shown on drawings and in schedules.
2. Provide types of architectural woodwork including the following:
 - .1 Standing and running trim including:
 - .1 Millwork
 - .2 Plywood edge banded shelving.
 - .2 Solid wood display countertops and millwork.

1.03 REFERENCES

1. AWI Quality Standard: Comply with applicable requirements of Architectural Woodwork Quality Standards: published by the Architectural Woodwork Institute (AWI), except as otherwise indicated.

1.04 SUBMITTALS

1. Submit manufacturer's product data for each product and process specified as work of this section and incorporated into items of architectural woodwork during fabrication, finishing, and installation.

1.05 PRODUCT DELIVERY STORAGE AND HANDLING

1. Protect millwork during transit, delivery, storage and handling to prevent damage, soiling and deterioration.
2. Do not deliver woodwork, until painting, wet work, grinding and similar operations which could damage, soil or deteriorate woodwork have been completed in installation areas. If, due to unforeseen circumstances, woodwork must be stored in other than installation areas, store only in areas meeting requirements specified for installation areas.

1.06 JOB CONDITIONS

1. Installer shall advise Contractor of temperature and humidity requirements for millwork installation areas. Do not install millwork until required temperature and relative humidity have been stabilized and will be maintained in installation areas.
2. Maintain temperature and humidity in installation area as required to maintain moisture content of installed millwork within a 1.0 percent tolerance of optimum moisture content, from date of installation through remainder of construction period. The fabricator of millwork shall determine optimum moisture content and required temperature and humidity condition.
3. Before proceeding with fabrication of millwork required to be fitted to other construction, obtain field measurements and verify dimensions and show drawing details as required for accurate fit.
 - .1 Where sequence of measuring substrates before fabrication would delay the project, proceed with fabrication (without field measurements) and provide ample borders and edges to allow for subsequent scribing and trimming of woodwork for accurate fit.

PART - 2 PRODUCTS

2.01 BASIC MATERIALS AND FABRICATION METHODS

1. Except as otherwise indicated, comply with following requirements for architectural millwork not specifically indicated as prefabricated or prefinished standard products.
2. Provide kiln-dried lumber with an average moisture content range of 9% to 13%.
3. Interior Wood for Transparent Finish:
 - .1 Solid Wood: Plain Sliced Red Oak.
 - .2 Plywood: Plain Sliced Red Oak.
4. Interior Wood for Opaque Finish:
 - .1 Plywood: Any closed-grain hardwood plywood with exterior glue complying with requirements for specified woodwork grade.
 - .2 Trim: Lumber species: Clear Poplar.

5. For following types of architectural woodwork: comply with indicated quality standards as applicable:
 - .1 Standing and Running Trim: AWI Section 300.
 - .2 Casework and Countertops: AWI Section 400.
 - .3 Shelving: AWI Section 600.
 - .4 Miscellaneous Work: AWI Section 700.
6. Design and Construction Features: Comply with details shown for profile and construction of architectural millwork; and, where not otherwise shown, comply with applicable Quality Standards, with alternate details as Fabricator's option.
7. Fabricate architectural millwork with pre-cut openings, where possible, to receive hardware, appliances, plumbing fixtures, electrical work and similar items. Locate openings accurately and use templates or roughing-in diagrams for proper size and shape. Smooth edges of cutoffs and, where located in countertops and similar exposures seal edges of cutouts with a water resistant coating.

2.02 FIRE-RETARDANT MATERIALS

1. Where fire-retardant treated lumber and veneer core plywood is indicated, provide materials which comply with applicable AWPA standards for pressure impregnation with fire-retardant chemicals and with the following requirements.
 - .1 Use cured organic resin solution for fire-retardant treatment which is relative insoluble in water, is suitable for exterior applications, will not bleed through or otherwise adversely affect types of finishes indicated, and permits milling of lumber after treatment and kiln drying by a treatment or woodworking plant certified by UL.
2. Where fire-retardant particleboard is indicated, provide panels with fire-retardant chemicals incorporated at time of manufacture to achieve surface-burning characteristics of 25 for flame spread, 10 for fuel contributed and 25 for smoke developed when tested in accordance with ASTM E84. Comply with ANSI A 108.1 for Grade 1-M-1 panels with density of 48 lbs./cu. ft. for thicknesses of 3/4" and less, 44 lbs./cu. ft. for thicknesses of 13/16" to 1-1/4"; except as follows:
 - .1 Fiber Stress and modulus of elasticity: 1600 psi and 35,000 psi for 48 lb. density, 1300 psi and 275,000 psi for 44 lb. density.
 - .2 Linear expansion of 0.50 for 44 lb. density.
 - .3 Screw-holding capacity, face and edge, of 300 lbs., respectively, for 44 lb. density.

2.03 SOLID WOOD COUNTERTOPS AND MILLWORK

1. Except as otherwise indicated provide separate wood display countertops (installed on support system as indicated) to comply with requirements for casework for solid wood.
 - .1 Grade: Premium.

PART 3 - EXECUTION

3.01 PREPARATION

1. Condition woodwork to average prevailing humidity conditions in installation areas prior to installing.
2. Meet at project site prior to delivery of architectural millwork and review coordination and environmental controls required for proper installation and ambient conditioning in areas to receive work. Include in meeting the Contractor; Architect and other Owner Representatives (if any); installers of architectural millwork, other finishes, painting, mechanical work and electrical work; and firms or persons responsible for continued operation (whether temporary or permanent) of HVAC system as required to maintain temperature and humidity conditions. Proceed with millwork installation only when everyone concerned agrees that required ambient conditions can be properly maintained.

3.02 INSTALLATION

1. Install the work plumb, level, true and straight with no distortions. Shim as required using concealed shims. Install to a tolerance of 1/8" in 8'-0" for plumb and level (including countertops); and 1/16" maximum offset in flush adjoining surfaces, 1/8" maximum offsets in revealed adjoining surfaces.
2. Scribe and cut work to fit adjoining work, and refinish cut surfaces or repair damaged finish at cuts. Provide filler strips to match cabinetry in all locations as required by field conditions.
3. Install standing and running trim with minimum number of joints possible, using full-length pieces (from maximum length of lumber available) to the greatest extent possible. Stagger joints in adjacent and related members. Cope at returns, miter at corners, and comply with Quality Standards for joinery.

4. Anchor woodwork to anchors or blocking built-in or directly attached to substrates. Secure to grounds or blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Except where prefinished matching fasteners heads are required, use fine finishing nails for exposed nailing, countersunk and filled flush with woodwork, and matching final finish where transparent finish is indicated.
5. Install casework without distortion so that doors and drawers will fit openings properly and be accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete the installation of hardware and accessory items as indicated. Maintain veneer sequence matching (if any) of casework with transparent finish.
6. Complete the assembly of wood storage shelving units and install in the areas indicated, including hardware and accessories as indicated.
7. Provide edge banding on all sides of shelving and miter all corners of plywood. Edge band all exposed ends of plywood.

3.03 ADJUSTMENT, CLEANING, FINISHING AND PROTECTION

1. Repair damaged and defective woodwork and laminate wherever possible to eliminate defects functionally and visually. Where not possible to repair properly, replace millwork. Adjust joinery for uniform appearance.
2. Contractor shall protect architectural woodwork and laminate during remainder of construction period to ensure that work will be without damage or deterioration at time of acceptance.
3. Clean hardware, lubricate and make final adjustments for proper operation.

END OF SECTION