

SECTION 06 05 73

WOOD TREATMENT

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes the requirements for preservative treated and fire-retardant treated wood.
- B. Related Sections:
 - 1. Miscellaneous carpentry items are specified in Section 06 10 53.
 - 2. Interior architectural woodwork is specified in Section 06 40 23.

1.02 SUBMITTALS

- A. Wood Treatment Data: Treatment manufacturer's instructions for handling, storing, installing and finishing of treated material.

1.03 QUALITY ASSURANCE

- A. Wood Treatment Plant: Experienced in performing work required in this Section that has specialized in treatment of wood similar to that required for this Project and is licensed by the wood treatment manufacturer.

1.04 ENVIRONMENTAL QUALITY ASSURANCE

- A. Protect against airborne transmission of chemical treatments to surrounding area.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Store treated wood materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by manufacturer. Prevent exposure to precipitation during shipping, storage or installation. Store material off ground and under cover.
- B. For interior fire-retardant treated wood, avoid exposure to precipitation during shipping, storage and installation. If wood becomes wet, replace or allow to dry to a maximum moisture content of 19-percent for lumber and 15-percent for plywood prior to covering or enclosure by gypsum board, roofing or other construction materials.

PART 2 - PRODUCTS

2.01 PRESERVATIVE TREATED WOOD

- A. General: Provide preservative-treated wood at areas where wood is in contact with concrete and masonry.
- B. Material: Waterborne Alkaline Copper Quaternary (ACQ) preservative system containing no arsenic and no chromium.
- C. Approved Manufacturer: Chemical Specialties, Inc. "Preserve" or approved equal.
- D. Comply with AWP Standard U1 and T1.
- E. Retention Rates: As recommended by manufacturer for applications required.
- F. End Cut Preservative: Acceptable to manufacturer of ACQ preservative.
- G. All ACQ preservative treated wood members shall bear an end tag or permanent ink stamp indicating name of wood treating company, treatment plant city and state, symbol for alkaline copper quaternary (ACQ), preservative retention level, approved use, and code report number.

2.02 FIRE-RETARDANT PRESSURE TREATED WOOD

- A. General: All lumber and plywood to be fire retardant treated shall be pressure impregnated with fire-retardant chemicals and shall have a flame spread rating of 25 or less when tested in accordance with ASTM E84. When test conditions are extended to 30-minutes, the flame spread shall not progress more than 10-1/2-feet beyond the center line of the burners, with no evidence of significant progressive combustion.

- B. Each piece of fire-retardant treated lumber and plywood shall be manufactured under Timber Products Inspection or other independent third party follow-up inspection service, and each piece shall bear the appropriate qualified inspection agency's label indicating surface burning characteristics in the 30-minute ASTM E84 flame spread test. Each piece shall be labeled indicating kiln dried after treatment (KDAT) and identifying the treating company and location.
- C. Interior Wood:
1. Approved Manufacturer: Hoover Treated Wood Products, Inc. "Pyro-Guard", Chemical Specialties, Inc. "D-Blaze" or approved equal.
 2. Structural performance of fire retardant treated wood shall be evaluated in accordance with ASTM D5664 for lumber and ASTM D5516 for plywood. Evaluation of plywood data shall be in accordance with ASTM D6304. The resulting design value and span rating adjustments shall be published in ICC Evaluation Service Report (ESR) – 1791 issued by the ICC Evaluation Service, Inc. which includes evaluation of high temperature strength testing for roof applications.
 3. Interior fire retardant treated lumber and plywood shall have equilibrium moisture content of not over 28-percent when tested in accordance with ASTM D3201 at 92-percent relative humidity.
 4. Interior fire retardant treated wood shall be kiln dried after treatment to a maximum moisture content of 19-percent for lumber and 15-percent for plywood.
 5. The fire retardant formulation shall be free of halogens, sulfates, chlorides, arsenic, ammonium phosphate, formaldehyde, and urea formaldehyde.
 6. Provide lumber of the appropriate grade and species as specified by the design criteria of the intended application after consideration of design value adjustment.
 7. Provide plywood of the appropriate size, grade and species as specified by the design criteria of the intended application after consideration of span rating adjustments.
- D. Fire-retardant treatment shall be a clear product and shall not change the appearance of the wood.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

- A. Preservative-Treated Wood: Handle, store, and install fire-retardant-treated wood in compliance with recommendations of chemical treatment manufacturer, including those for adhesives where required for installation.
1. Field Cuts: Where cut or drilled in field, treat cut ends with preservative solution used in original treatment by brushing, spraying, dipping, or soaking. Treat end cuts of ACQ preservative treated wood members with field-applied end coat prior to installation.
- B. Fire-Retardant Treated Wood: Handle, store, and install fire-retardant-treated wood in compliance with recommendations of chemical treatment manufacturer, including those for adhesives where required for installation.
1. Field Cuts:
 - a. Lumber: Do not rip or mill fire retardant treated lumber. Cross cuts, joining cuts, and drilling holes are permitted.
 - b. Plywood: Fire retardant plywood may be cut in any direction.
 2. Do not install interior fire-retardant treated wood in areas where it is exposed to precipitation, direct wetting, or regular condensation. Do not install as sill plates; use exterior fire-retardant treated wood.

3.02 WASTE MANAGEMENT

- A. General: Comply with Section 01 74 19.
- B. Hazardous waste shall be separated, stored and disposed of according to local regulations.

END OF SECTION