

# SECTION 06 05 73.13 FIRE RETARDANT WOOD TREATMENT – D-BLAZEPRESSURE TREATED WOOD

## PART 1 GENERAL

### 1.1 SECTION INCLUDES

- A. Fire-retardant treatment of lumber and plywood.

### 1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry.
- B. Section 06 15 00 - Wood Decking.
- C. Section 06 20 00 - Finish Carpentry.

### 1.3 REFERENCES

- A. ASTM International (ASTM):
  1. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
  2. ASTM A653 / A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
  3. ASTM D3201 - Standard Test Method for Hygroscopic Properties of Fire-Retardant Wood and Wood-Base Products.
  4. ASTM D5516 - Standard Test Method for Evaluating the Flexural Properties of Fire-Retardant Treated Softwood Plywood Exposed to Elevated Temperatures.
  5. ASTM D5664 - Standard Test Method for Evaluating the Effects of Fire-Retardant Treatments and Elevated Temperatures on Strength Properties of Fire-Retardant Treated Lumber.
  6. ASTM D6305 - Standard Practice for Calculating Bending Strength Design Adjustment Factors for Fire retardant Treated Plywood Roof Sheathing.
  7. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. American Wood-Protection Association (AWPA):
  1. AWPA E12 - Standard Method of Determining the Corrosion of Metal in Contact with Wood.
  2. AWPA M4 - Standard for the Care of Preservative Treated Wood Products.
  3. AWPA P5 - Standard for Waterborne Preservatives.
  4. AWPA P17 - Fire Retardant Formulations.
  5. AWPA P50 - Standard for Fire Retardant FR-2 (FR-2).
  6. AWPA T1 - Use Category System: Processing and Treatment Standard.
  7. AWPA U1 - Use Category System: User Specification for Treated Wood.
- C. GREENGUARD Environmental Institute: GREENGUARD Green Certified Products.
- D. National Fire Protection Association (NFPA) 255 Method of Test of Surface Burning Characteristics of Building Materials.
- E. ESR 2645 D-Blaze Fire Retardant Treatment; International Code Council -Evaluation Service, ICC-ES.
- F. Underwriters Laboratories, Inc. (UL) 723 Tests for Surface Burning Characteristics of Building Materials.
- G. Hawaiian Local Building Code Standards.

### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's instructions for use, including requirements for storage, cutting, and finishing.

- C. Preservative Treatment Certification: Treating plant's certification of compliance with specified standards, process employed, and preservative retention values.
- D. Fire-Retardant Treatment Certification: Treating plant's certification of compliance with specified requirements.

## 1.5 QUALITY ASSURANCE

- A. Wood Treatment Plant Qualifications: Wood treatment plant experienced in performing work of this section licensed by Viance, LLC.
- B. Source Quality: Obtain treated wood products from a single approved source.
- C. Preservative Treatment: Mark each piece of plywood and lumber to show compliance with specified standards.
- D. Fire-Retardant Treatment: Mark each piece of plywood and lumber to show compliance with specified standards.
- E. Regulatory Requirements: Provide fire retardant treatment which complies with the following regulatory requirements:
  - 1. International Building Code (IBC).
  - 2. International Residential Code (IRC).
  - 3. International Code Council Evaluation Service ICC-ES ESR 2645.
  - 4. City of Los Angeles, California RR24502.
  - 5. City of New York, New York Building Code, MEA 406 and MEA 407.
  - 6. Hawaiian Local Building Code Standards.
- F. Independent Third Party Inspection:
  - 1. Provide plant inspections.
- G. Low Chemical Emission Certification:
  - 1. GREENGUARD Gold Certified.
- H. Kiln Dry after Treatment (KDAT): Provide kiln dry material as indicated or required.
  - 1. Kiln dry after treatment to 19 percent maximum moisture content for lumber and 18 percent for plywood in accordance with AWWA T1, Section 7 - Drying After Treatment (lumber) and AWWA T1, Section: F: Pressure treated composites (3c) kiln drying after treatment.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Exposure: Prevent wood products against moisture and dimensional changes, in accordance with instructions from treating plant.

## 1.7 WARRANTY

- A. Manufacturer's Warranty: Provide manufacturer's standard 50-year limited warranty for pressure-treated FRTW wood.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Viance - Treated Wood Solutions, which is located at: 8001 IBM Dr. Building 403; Charlotte, NC 28262; Toll Free Tel: 800-421-8661; Tel: 704-522-0825; Fax: 704-527-8232; Email: [request info \(info@viance.net\)](mailto:info@viance.net); Web: [www.treatedwood.com](http://www.treatedwood.com)
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
- C. Substitutions: Not permitted.

## 2.2 MATERIALS

- A. Dimension Lumber: As specified in Section 06 10 00 - Rough Carpentry.
- B. Structural Plywood: As specified in Section 06 10 00 - Rough Carpentry.
- C. Finish Lumber and Plywood: As specified in Section 06 20 00 - Finish Carpentry.
- D. Fasteners and Metal Hardware Provide corrosion resistant steel fasteners with hot-dip zinc coating per ASTM A153/A153M, provide corrosion resistant hardware per ASTM A653 / A653M Class G-185 in compliance with building code requirements.
- E. Fasteners used in D-Blaze Fire-Retardant Treated Wood: Use only code approved fasteners as specified in ICC-ES ESR 2645. Fasteners must be galvanized steel, stainless steel, silicon bronze or copper, in accordance with 2009 and 2006 IBC Section 2304.9.5, 2009 IRC Section R317.3 or 2006 IRC Section R319.3

## 2.3 FIRE RETARDANT PRESSURE TREATMENT OF LUMBER AND PLYWOOD

- A. Fire retardant treatment for wood, including roof and floor trusses, roof decks and sheathing; subflooring, beams and purlins, blocking and furring, studs, joists and paneling, architectural millwork and trim, interior non-load bearing partitions and exterior load-bearing walls.
  - 1. Lumber: Comply with AWWA U1 UCFA, Type A or ICC-ES ESR 2645.
  - 2. Plywood: Comply with AWWA U1, UCFA, Type A or ICC-ES ESR 2645.
  - 3. Surface Burning Characteristics: UL FR-S rating; or flame spread, and smoke developed ratings of 25 or less in a test of 30 minutes' duration in accordance with IBC section 2303.2.
  - 4. Treatment: D-Blaze FRT as manufactured by Viance.
  - 5. Kiln dry after treatment to 19 percent maximum moisture content for lumber and 15 percent for plywood.
  - 6. Treat wood used for the following applications:
    - a. Roof and floor trusses.
    - b. Roof decks and sheathing.
    - c. Subflooring.
    - d. Beams and purlins.
    - e. Interior non-load bearing partitions.
    - f. Studs and joists.
    - g. Exterior load-bearing walls protected by weather barrier.
    - h. Millwork and trim.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Fire-Retardant Treated Wood:
  - 1. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.
  - 2. End cuts and drilling are permitted. Do not rip or mill lumber after fire-retardant treatment.

END OF SECTION