

SECTION 06072

FIRE-RETARDANT TREATED WOOD PRODUCTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fire Retardant Treated Dimension Lumber.
- B. Fire Retardant Treated Plywood.

1.2 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry.
- B. Section 06112 - Framing and Sheathing.
- C. Section 06114 - Wood Blocking and Curbing.
- D. Section 06200 - Finish Carpentry.
- E. Section 06075 - Preservative Treatment for Wood.

1.3 REFERENCES

- A. American Lumber Standard Committee - Softwood Lumber Standards.
- B. APA - Design and Construction Guide for Residential and Commercial Uses; APA - The Engineered Wood Association.
- C. AWWA C20 - Structural Lumber--Fire Retardant Treatment by Pressure Processes; American Wood-Preservers' Association.
- D. AWWA C27 - Plywood Fire Retardant Treatment by Pressure Process; American Wood-Preservers' Association.
- E. AWWA P17 - Fire Retardant Formulations; American Wood-Preservers' Association.
- F. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- G. MS MIL-L-19140 - Fire Retardant Wood Preservative Chemicals.
- H. NFPA 255 - Standard Method of Test for Surface Burning Characteristics of Building Materials.

- I. NLGA - Grading Rules; National Lumber Grades Authority.
- J. SPIB - Standard Grading Rules for Southern Pine Lumber; Southern Pine Inspection Bureau.
- K. UL 723 - Standard Method of Test for Surface Burning Characteristics of Building Materials.
- L. WCLB - Standard Grading and Dressing Rules; West Coast Lumber Inspection Bureau.
- M. WWPA - Western Lumber Grading Rules; Western Wood Products Association.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data:
 - 1. Manufacturer's printed literature indicating product compliance to specified requirements.
 - 2. Manufacturer's recommendations for storage and protection of product on site.
 - 3. Copy of numbered National Evaluation Services Report specified in Quality Assurance Article of this Section.

1.5 SYSTEM DESCRIPTION

- A. Performance Requirements:
 - 1. Fire Rating: Provide UL listed Class A/Class I fire retardant treated wood products exhibiting maximum flame spread of 25, when tested in accordance with ASTM E 84, NFPA 255, or UL 723, and no evidence of significant combustion when test is extended for and additional 20 minutes.
 - 2. Corrosive Properties: Carbon steel, galvanized steel, aluminum, copper, and red brass in contact with fire retardant treated wood products to exhibit maximum corrosion rates of one (1) mil (0.025 mm) per year when tested in accordance with MIL-L-19140.

1.6 QUALITY ASSURANCE

- A. Regulatory Requirements: Fire retardant chemicals registered for use as wood preservative by U. S. Environmental Protection Agency.
- B. Certifications: Test results of fire performance, strength, and corrosive properties of fire retardant treated wood products issued in numbered National Evaluation Services Report.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Storage and Protection: Store fire retardant treated wood products on site in accordance with manufacturer's recommendations.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Licensed producer of Hickson Corporation DRICON Fire Retardant Treated Wood Products. ASD.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- C. Substitutions: Not permitted.

2.2 MATERIALS

- A. Fire Retardant Treated Dimension Lumber:
 1. Acceptable Product: DRICON Fire Retardant Treated Wood.
 2. Grading Agency: ALSC.
 3. Grading Agency: WWPA.
 4. Grading Agency: SPIB.
 5. Grading Agency: WCLB.
 6. Grading Agency: _____.
 7. Studs: _____ grade; _____ species group.
 8. Miscellaneous Framing: _____ grade; _____ species group.
 9. Structural Framing: _____ grade; _____ species group.
 10. Structural Framing: Any species and grade which meets or exceeds the following values:
 - a. Fb (Extreme Fiber Stress in Bending): _____ pounds per square inch (_____ Mpa).

- b. E (Modulus of Elasticity): _____ pounds per square inch (____ Mpa).
- 11. Grading agency: NLGA.
- 12. Studs: Stress Group _____.
- 13. Miscellaneous Framing: Stress Group _____.
- 14. Structural Framing: Stress Group _____.
- 15. Structural Framing: Any species and grade which meets or exceeds the following values:
 - a. Fb (Extreme Fiber Stress in Bending): _____ pounds per square inch (____ Mpa).
 - b. E (Modulus of Elasticity): _____ pounds per square inch (____ Mpa).
- 16. Sizes: Indicated on Drawings.

B. Fire Retardant Treated Plywood:

- 1. Acceptable Product: DRICON Fire Retardant Treated Plywood.
- 2. Plywood Grading Agency: Certified by APA, TECO, or PTL.
- 3. Floor Sheathing: _____ grade, _____ species; panel size __ feet (____ m) by __ feet (____ m), ____ inch (____ mm) thickness.
- 4. Floor Sheathing: APA Rated Sheathing Structural Grade __, Span Rating _____, Exposure Durability __, sanded; panel size __ feet (____ m) by __ feet (____ m), ____ inch (____ mm) thickness.
- 5. Floor Underlayment: _____ grade, _____ species; panel size __ feet (____ m) by __ feet (____ m), ____ inch (____ mm) thickness.
- 6. Floor Underlayment: APA Rated Sheathing Structural Grade __, Span Rating _____, Exposure Durability __, sanded; panel size __ feet (____ m) by __ feet (____ m), ____ inch (____ mm) thickness.
- 7. Wall Sheathing: _____ grade, _____ species; panel size __ feet (____ m) by __ feet (____ m), ____ inch (____ mm) thickness.
- 8. Wall Sheathing: APA Rated Sheathing Structural Grade __, Span Rating _____, Exposure Durability __, sanded; panel size __ feet (____ m) by __ feet (____ m), ____ inch (____ mm) thickness.
- 9. Roof Sheathing: _____ grade, _____ species; panel size __ feet (____ m) by __ feet (____ m), ____ inch (____ mm) thickness.
- 10. Roof Sheathing: APA Rated Sheathing Structural Grade __, Span Rating _____, Exposure Durability __, sanded; panel size __ feet (____ m) by __ feet (____ m), ____ inch (____ mm) thickness.

11. Telephone and Electrical Backboards: _____ grade, _____ species; panel size __ feet (____ m) by __ feet (____ m), __ inch (____ mm) thickness.
12. Miscellaneous Plywood: _____ grade, _____ species; thicknesses indicated on drawings.

2.3 FABRICATION

- A. Fire Retardant Chemicals: Formulated free of halogens, sulfates, and ammonium phosphate, and for fungal and termite inhibitive properties; conforming to AWPA P17.
- B. Fire Retardant Treated Dimension Lumber: Kiln-dried to maximum moisture content 19 percent after pressure impregnation with fire retardant chemicals; conforming to AWPA C20.
- C. Fire Retardant Treated Plywood: Kiln-dried to maximum moisture content 15 percent after pressure impregnation with fire retardant chemicals; conforming to AWPA C27.

2.4 SOURCE QUALITY CONTROL

- A. Tests, inspections: Fire retardant chemicals UL listed; follow-up inspections conducted by UL.
- B. Verification of performance: Factory-mark each piece of fire retardant treated wood products with the following:
 1. UL imprint certifying Class A/Class I flame spread rating.
 2. Imprint certifying Interior Type A product classification.
 3. Imprint certifying kiln-drying after treatment (KDAT).
 4. Imprint of number of National Evaluation Services Report specified in Quality Assurance Article of this section.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Fire Retardant Treated Dimension Lumber:
 1. Install in accordance with Section 06100 and Section 06200.

2. Field-cut lumber for required lengths, drilled holes, or joining cuts only; ripping or milling of lumber is prohibited.
 3. Secure lumber with fasteners of galvanized steel or other corrosion resistant material.
- B. Fire Retardant Treated Plywood:
1. Install in accordance with Section 06100 and Section 06200.
 2. Comply with nailing schedules and panel spacings specified in APA "Design and Construction Guide for Residential and Commercial Uses", including use of plyclips where required, unless otherwise indicated.
 3. Secure plywood panels with fasteners of galvanized steel or other corrosion resistant material; use of staples is prohibited.

END OF SECTION