

SECTION 06071
INTERIOR FIRE RETARDANT TREATED WOOD
UNFINISHED NON-EXPOSED LUMBER

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Fire Retardant treatment of lumber and plywood
- B. Fire Retardant treatment of wood trim and moldings
- C. Fire Retardant treatment of blocking and curbing

1.2 RELATED SECTIONS

- A. Section 06100 – Rough Carpentry
- B. Section 06114 – Wood Blocking and Curbing
- C. Section 06200 – Finish Carpentry
- D. Section 06400 – Architectural Woodwork

1.3 REFERENCES

- A. ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials
- B. NFPA 255 – Standard Test Method for Surface Burning Characteristic of Building Materials
- C. U.L. 723 – Standard Test Method for Surface Burning Characteristics of Building Materials
- D. NFPA 703 – Standard for Fire Retardant Treated Wood and Fire Retardant Coatings for Building Materials
- E. ICC ES AC363 – Acceptance Criteria for Surface Applied Fire Retardant Coatings
- F. Anderson Laboratories: Evaluation of the Acute Inhalation Toxicity of the Combustion of Materials Using the University of Pittsburgh Test Method
- G. Hazelton Laboratories of America: Code of Federal Regulations, Vol. 16 Part 1500.30 - Evaluation of Acute Oral Toxicity Study
- H. Hazelton Laboratories of America: Federal Substance Act, 16 CFR 1500.41- Evaluation of Primary Dermal Irritation Study

1.4 SUBMITTALS

- A. Submit under provisions of Section 03100 – Submittal Procedures
 - 1. Product Data: Manufacturers printed product information including ICC Evaluation Service Report
 - Preparation instructions and recommendations
 - Storage and handling instructions
 - Application methods

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer shall be a firm engaged in the manufacture of the fire retardant treatment type required, and whose products have been in satisfactory use in similar service for a minimum of fifteen years.
- B. Applicator Qualifications: Applicator shall be a firm experienced in the installation of fire retardant treatments similar in type and scope to that required for this project and is certified by the manufacturer for installation of the product specified.
- C. Fire Retardant: Manufacturing of the fire retardant shall be listed under a quality control inspection program as administrated by Underwriters Laboratories Inc. (AA-668) and all containers of the fire retardant shall bear the Underwriters Laboratories Classification Mark.
- D. Regulatory Requirements: Provide fire retardant treatment that complies with the following codes and regulatory requirements
 - 1. 2012 International Building Code (IBC)
 - 2. 2012 International Residential Code (IRC)
 - 3. 2012 International Fire Code (IFC)
 - 4. 2012 International Existing Building Code (IEBC)
 - 5. City of New York, New York Building Code, MEA 406
 - 6. City of New York, New York Building Code, MEA 407

1.6 DELIVERY, STORAGE AND HANDLING

- A. Store fire retardant in original containers between minimum ambient air temperature of 33 F (0.6 C) and a maximum of 120 F 49 C)
- B. For lumber treated off-site in new construction prevent exposure to precipitation during shipping, storage or installation of fire retardant treated lumber. Store materials under cover or shelter, off the ground.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Provide fire retardant treatment by or certified applicator of International Fire-Shield, Inc, P.O. Box 7305, Auburn, NY 13022; Toll Free Tel: 800-513-5134; Tel: 315-255-1006; E-mail: nyfsinc@nyfs.com; Web: www.nyfs.com
- B. Substitutions: Not permitted
- C. Requests for substitutions will be considered in accordance with the provisions of Section 01600.

2.2 MATERIALS

A. Fire Retardant Treatment

1. Product: Provide treatment with “INSPECTA-SHIELD PLUS” as manufactured by International Fire-Shield, Inc.
2. Product acceptance and listings: ICC-ES Evaluation Report (ESR-2019); UL FUS AA-668; New York City Material Equipment Acceptance # 3114-86-m, # 311-90-m Pre 1960, 311-90-m Vol. 11 (25), 311-90-m Vol. 111 (25); New York City Fire Department Certificate of Acceptance # 4798
3. Toxicity: Product shall be listed as non-toxic as tested under Test Methods prescribed by Code of Federal Regulations, Vol. 16 Part 1500.30 and Federal Substance Act, 16 CFR 1500.41. Product shall be listed as no more toxic than the treated substrate when tested under the Pittsburgh Test Method of Acute Inhalation Toxicity of Combustible Materials

PART 3 EXECUTION

3.1 EXAMINATION FOR FIELD TREATMENT

- A. Do not begin application until substrates have been properly prepared or environmental conditions are outside of the Manufacturers absolute limits
- B. Examine for wet conditions; do not apply product to substrates that are wet or have been wet, unless they can be dried to the maximum moisture content as specified by the manufacturer

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to application of fire retardant

3.2.1

- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions

3.4.1 FIELD CUTTING TREATED LUMBER

- A. Field cut of previously treated lumber for required lengths, drilled holes or notching is permissible; ripping or milling of lumber after treatment must be re-treated by the certified applicator

3.3 PRODUCT APPLICATION

- A. Materials to be treated shall be free of dust, dirt, oil, paint, stain, varnish or sealant. Thoroughly mix product before application. Apply product at a coverage rate of 300 square feet per gallon by air-spray apparatus in one coat. Apply product when air temperature is between 33 F (0.6 C) and 120 F (49 C). The maximum moisture of the substrate to be treated prior to application of product shall not exceed 25 percent. In field applications, certified applicator shall perform field testing when required by the authority having jurisdiction as out lined in manufacturer's ICC-ES Evaluation Report (ESR-2019). Fire retardant treated substrates shall be identifiable with the use of an ultraviolet black light after the product has cured for a period of 48 hours. Fire retardant treated substrates delivered to the field or treated after installation shall be labeled with a permanent ink marking as follows:
- a. Product Manufacturer's Name or Certified Applicators Name
 - b. Date of Treatment
 - c. Certificate of Fire Resistance Tracking and Tag Number
 - d. Meets NFPA 703 Class A Finish

Lumber that is scheduled to receive a clear transparent finish or stain shall have a laminated tag affixed to the end grain with above information printed on the tag

3.4 SURFACE BURNING CHARACTERISTICS

- A. The product shall provide a flame spread index of 25 or less and a smoke-developed index of 200 or less when tested in accordance with ASTM E-84 and qualify as a Class "A" finish in accordance with NFPA 703
- B. The flame spread and smoke-development indices shall be applicable when the product is over-coated with two layers of acrylic paint or one layer of wood stain over-coated with one layer of polyurethane

3.5 CONFORMANCE CERTIFICATION

- A. The manufacturer shall provide written certification for the substrates treated for meeting the required code of the Authorities Having Jurisdiction

END OF SECTION