## HOOVER TREATED WOOD PRODUCTS, INC.

## TECHNICAL NOTE

FOR ADDITIONAL INFORMATION: www.frtw.com or 1-800-TEC-WOOD (832-9663)

## ADVANTAGES OF PYRO-GUARD®

**CODE COMPLIANCE**: Introduced in 1988 after extensive high temperature testing, Pyro-Guard was the first fire retardant-treated wood issued a Code Compliance Report containing span and strength tables for roof applications based on a predictive period of 50 years. The National Evaluation Service recognized Pyro-Guard with report NER 457 originally issued February 1992. In 2004, the NES and ICBO-ES merged to form a single evaluation service referred to as ICC-ES. The NER was converted to an ICC-ES Report (ESR) in November 2005 under the designation ESR-1791, substantiating compliance with the International Building (IBC) and International Residential (IRC) Code. Currently, ESR 1791 demonstrates that *Pyro-Guard fire retardant treated wood products comply with all building code requirements for fire retardant treated wood.* 

**LONG TERM STRENGTH IN ROOF APPLICATIONS:** The Evaluation Service report documents that the structural performance of Pyro-Guard treated plywood and lumber is derived using ASTM D 5516 and D 5664 and the practices D 6305 and D 6841. These accelerated tests and practices provide reliable data for the design professional when used in accordance with the manufacturer's recommendations. The 25 plus years of actual use in roof systems of Pyro-Guard continues to validate the accelerated testing data and published design value adjustments.

CHEMICAL FORMULATION AND APPLICATION: Pyro-Guard is formulated and then applied by means of pressure treatment in company-owned and company-controlled treating plants. Hoover Treated Wood Products, Inc. is the world's largest producer of FRTW with treatment facilities in Michigan, Georgia, Arkansas, Virginia, Oregon, and California. Unlike field applied surface coatings, Pyro-Guard fire retardant treated wood is produced under a quality control program with inspections by Underwriters Laboratories, Inc (UL) and Timber Products Inspection (TP).

**RE-DRYING AFTER TREATMENT:** All Pyro-Guard is kiln dried after treatment (KDAT) to meet the code requirements for moisture content of 19% for lumber and 15% for plywood. Hoover established the industry's first monitoring program for re-drying lumber and plywood with Timber Products Inspection. This assures that re-drying conditions and final moisture content for Pyro-Guard lumber and plywood conform to the established requirements.

UNDERWRITERS LABORATORIES: Each piece of Pyro-Guard lumber and plywood is stamped with the mark of Underwriters Laboratories, Inc (UL) substantiating third party confirmation of flame spread and smoke developed index. Companies may only use the UL mark on or in connection with products that have been investigated by UL and found to be in compliance with UL's requirements. The UL Building Materials Directory has listed over a dozen species of lumber and several species of plywood for fire retardant treatment with Pyro-Guard. Since the early 1960's, Hoover Treated Wood Products Inc has maintained classification of products with UL.

**FLAME SPREAD RATING**: Pyro-Guard is classified by Underwriters Laboratories as a Class A fire retardant. Pyro-Guard has been tested per the ASTM E-84 (UL 723, NFPA 255) and has a flame spread rating of 25 or less, no significant increase in combustibility when tested for 30 minutes, and the flame-front did not progress more than 10 ½ feet beyond the centerline of the burner at any time during the test.

**HYGROSCOPICITY:** Pyro-Guard is classified as Type A, (low hygroscopic) High Temperature (HT) fire retardant and meets code requirements when tested in accordance with ASTM D 3201.

DISCLAIMER OF LIABILITY FOR RELIANCE ON INFORMATION PROVIDED BY HOOVER TREATED WOOD PRODUCTS, INC.: The information contained herein is true and accurate to the best of our knowledge, but is provided without warranty or guarantee. Since the conditions of use are beyond our control, Hoover Treated Wood Products, Inc. ("Hoover") disclaims all liability and assumes no legal responsibility for damages resulting from use of or reliance upon the information contained herein.

**CORROSION:** Pyro-Guard is non-corrosive when used as recommended. When Pyro-Guard fire-retardant-treated wood products are used and installed in code-compliant interior enclosed dry applications not exposed to dampness or wetting, uncoated carbon steel fasteners are permitted. Pyro-Guard fire retardant treatment contains no halogens, sulfates, ammonium phosphate, urea-formaldehyde, VOC's or arsenic.

**SMOKE TOXICITY**: Pyro-Guard was tested in accordance with the requirements of the New York State Uniform Fire Prevention and Building Code. Independent third party evaluation of smoke produced by Pyro-Guard treated wood confirmed that it is no more toxic than smoke produced by untreated wood.

**INCISING:** Some fire-retardant-treated wood brands require lumber to be incised before treating. Pyro-Guard fire-retardant-treated wood is not incised resulting in better appearance an elimination of the modification factor for incising in the National Design Specification for Wood Construction (NDS).

**FSC:** Hoover can provide FSC materials with an FSC chain of custody for the material. Hoover's chain of custody number is SW-COC-002141. Pyro-Guard contains no formaldehyde in the formulation qualifying for credits in building rating systems such as LEED.

**DECAY AND TERMITE RESISTANCE:** Pyro-Guard Plus contains a chemical component widely recognized as a non-toxic, water-soluble wood preservative. Pyro-Guard treated wood is warranted for interior applications involving dry conditions.

**RECOGNITION:** Underwriters Laboratories, Inc., City of New York, (MEA 357-88-M, 358-88-M, and 359-88-M), City of Los Angeles (RR25150), California State Fire Marshals (2520-1701:103, 2580-1701:102), Underwriters Laboratories of Canada, British Standard 476 part 7, MIL-L-19140, Qualified Products List (QPL), and others.

**WARRANTY COVERAGE**: Pyro-Guard was the first FRTW to provide a written replacement cost warranty, covering materials and labor for plywood and lumber. This has been true since the Pyro-Guard warranty was first introduced.

- Dricon and D-Blaze void their warranties if their licensed Treater does not properly pressure treat to specifications.
- The Pyro-Guard warranty does not require registration and is extended to the "holder" of the wood (i.e., the owner).
- The Pyro-Guard warranty covers all recommended uses, not just roof uses.
- The Dricon Roof System warranty came out later and covers only roof systems.
- The Dricon Roof System warranty does not cover floor joists, underlayment, wall sheathing, wall framing or any non-structural application.
- The Dricon Roof System warranty is voided if any other brand of FRTW is used in a project.
- The Dricon and D-Blaze warranties require builder registration.
- D Blaze is a builder warranty agreement only and must be registered within 30 days of installation.
- All warranties require ventilation.

Information on Dricon and D-Blaze is based on information readily available and is correct to the best of our knowledge.

The best comparison of these warranties is to put them side by side, read and evaluate the details of each one.