

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Housing - Federal Housing Commissioner TO: DIRECTORS, SINGLE FAMILY HOCs DIRECTORS, MULTIFAMILY HUBs		Series and Series Number: MATERIALS RELEASE NO. 1261b (Supersedes issue dated September 3, 1998)
		ISSUE DATE February 6, 2002
		REVIEW DATE February 6, 2005
SUBJECT:		
1. Product	Dricon Fire Retardant Treated Wood	
2. Name and Address of Manufacturer	Arch Wood Protection, Inc. 1955 Lake Park Drive Suite 250 Smyrna, GA 30080	

Data on the nonstandard product described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

USE: Fire retardant treated wood for interior use.

DESCRIPTION:

The Dricon fire retardant treated wood (FRTW) consists of lumber and plywood which have been pressure impregnated with the Dricon chemicals. The Arch Wood Protection, Inc. produces the Dricon fire retardant chemicals which are covered by U. S. Patent 4373010. The Arch Wood Protection, Inc. provides the chemicals to its licensed treaters. The treating, handling, processing, kiln drying and quality control requirements are established by Arch Wood Protection, Inc. Arch Wood Protection, Inc. is responsible for the supervision of its licensees and for the performance of the final product.

REQUIREMENTS:

Dricon FRTW shall meet the following requirements:

- a. All lumber and plywood shall be grademarked by an approved agency.

- b. American Wood Preservers' Association Standard C 20-93, Structural Lumber - Fire-Retardant Treatment by Pressure Processes, Interior Type A except that during kiln drying the dry bulb temperature of the kiln shall not exceed 160°F.
- c. American Wood Preservers' Association Standard C 27-93 Plywood - Fire-Retardant Treatment by Pressure Processes, Interior Type A, except that during kiln drying the dry bulb temperature of the kiln shall not exceed 160°F.
- d. Underwriters Laboratories, Inc. ULI 723 Standard Test for Surface Burning Characteristics of Building Materials Rated FR-S. (ASTM E 84 Test Method for Surface Burning Characteristics of Building Materials).
- e. Military Specifications MIL-0019140 (SH), Lumber and Plywood, Fire-retardant Treated.

DESIGN:

The design of lumber members shall be in accordance with the National Design Specification for Wood Construction, except that only the following listed species may be used and the design is subject to the strength reduction factors of Table No. 1, Strength Design Factors.

Listed Species

Douglas Fir	Spruce-Pine-Fir
Redwood	Spruce
White Pine	Ponderosa Pine
Hem Fir	Western Red Cedar
Southern Pine	White Fir
Red Pine	Western Hemlock

Table No. 1

Strength Design Factors
 Dricon® Fire Retardant Treated
 Lumber Compared To Untreated Lumber
 Applicable At Temperatures Up To 150°F

	Listed Species			
	Southern Pine	Douglas Fir	Spruce	Other Listed Species
Compression Parallel, F_c	0.67	0.65	0.67	0.65
Horizontal Shear, F_v	0.69	0.67	0.69	0.67
Tension Parallel, F_t	0.85	0.80	0.85	0.80
Bending: Modulus of Elasticity, E	0.91	0.91	0.91	0.91
Extreme Fiber Stress, F_b	0.80	0.80	0.80	0.80

Plywood panels shall conform to the requirements of PS 1-83 Exterior or Exposure 1. Face and back veneers shall be Yellow Pine or Douglas Fir. The minimum panel thickness for roof sheathing shall be 7/16". Panel design shall conform to Table No. 2 Dricon Plywood Span Ratings for Rated Sheathing.

Table No. 2

Dricon® Plywood Span Ratings
For Rated Sheathing
Applicable At Temperatures Up to 170°F

Span Rating	Panel Thickness	DRICON Rating
24/16	7/16, 1/2	24/16
32/16	15/32, 1/2	24/16
32/16	5/8	32/16
40/20	5/8, 19/32	32/20
40/20	3/4, 7/8	40/20
48/24	23/32, 3/4	40/24
48/24	7/8	48/24

LIMITATIONS:

Dricon FRTW shall not be used where it will be exposed to rain, direct wetting, periodic condensation or in contact with the ground. Store Dricon FRTW off the ground and shielded from the rain.

QUALITY ASSURANCE:

All lumber and plywood shall be grade marked by an approved agency. The face and back plies of the plywood shall be Southern Pine or Douglas Fir. Arch Wood Protection, Inc. shall provide the chemicals to its licensed treaters. Arch Wood Protection, Inc. shall establish the standards for treating, processing, kiln drying, testing and quality control for the FRTW and Arch Wood Protection, Inc. shall monitor compliance of its licenses with the standards.

Dricon FRTW shall be produced under the Follow-Up Service of Underwriters Laboratories, Inc. to assure compliance with File No. 2809, Volume 9 for lumber and File No. 378, Volume 5 for plywood. Quality assurance records shall be made available for inspection by HUD upon request.

CERTIFICATION AND PANEL MARKING:

Arch Wood Protection, Inc. shall certify that the Dricon FRTW conforms to the requirements of this Materials Release (MR). Arch Wood Protection, Inc. shall certify that the face and back plies of the treated plywood are Yellow Pine or Douglas Fir. Arch Wood Protection, Inc. shall mark each panel with the species of the face and back or provide a certificate with each pallet which certifies the species of the face and back. Each piece of lumber and plywood certified as conforming to this MR shall be marked with the following information:

Sample Stamps

- a. Arch Wood Protection, Inc.
- b. Dricon Fire Retardant Treated Wood.
- c. Underwriters Laboratory, Inc., classified FR-S Lumber 15P3 in accordance with AWPA C-20, Interior Type A or classified FR-S plywood 15P4 in accordance with AWPA C-27, Interior Type A.
- d. KDAT (Kiln Dried After Treatment).
- e. Month and year of treatment.
- f. Plant identification number or name of treating company and plant location.
- g. HUD MR 1261b.

WARRANTY:

Arch Wood Protection, Inc. warrants Dricon Fire Retardant Treated wood to be free of any defects due to faulty materials and workmanship in the manufacturing process for a period of 20 years from the date of installation.

The liability of Arch Wood Protection, Inc. under this warranty shall be limited to replacement of defective materials and the cost of installation or at the option of Arch Wood Protection, Inc., payment in lieu thereof.

This warranty is limited and applies to any material failure due to manufacturing only and does not cover nor will the manufacture be liable for any defects or damages due to misuse, improper storage, lightning, or other caused beyond the manufacturer's control.

The manufacturer's warranty does not relieve the builder, in any way, of his responsibility under the terms of the Builder's Warranty required by the National Housing Act or under any provisions applicable to any other program. A copy of the manufacturer's warranty shall be furnished by the builder to the homeowner.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this MR commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
3. When requested, provide the Office of Manufactured Housing and Regulatory Functions, Manufactured Housing and Construction Standards Division, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of the MR shall apply for a renewal or revision 90 days prior to the review date printed on this MR. Submittals for renewal or revision shall be sent to

U. S. Department of Housing and Urban Development
Manufactured Housing and Standards Division
451 7th Street, SW, Room 9152
Washington, DC 20410

Appropriate user fees shall be sent to:

U. S. Department of Housing and Urban Development
Technical Suitability of Products Fees
P. O. Box 954199
St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. The revision may be in the form of a supplement to the MR.

Where the Department determines that a proposed revision constitutes a different item, the appropriate user fee shall be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer or producer that the MR may be canceled when:

1. conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product or system,
2. the producer has changed its organizational form without notifying HUD, or
3. the producer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.

This Materials Release is issued solely for the captioned firm, and is not transferable to any person or successor entity.
