



TECHNICAL NOTE

FOR ADDITIONAL INFORMATION: www.frtw.com or 1.800.TEC.WOOD (832.9663)

AWPA C20 & C27 STANDARDS PyroGuard™ & ExteriorFireX™ FRTW

PyroGuard™ and ExteriorFireX™ meet the performance criteria of the AWPA Standards.

The Underwriters Laboratories Inc. Evaluation Report UL ER7002-01 for PyroGuard™ is your assurance that PyroGuard™ treated wood has been reviewed using the latest criteria and meets the requirements of the International Codes.

The International Building (IBC) and Residential (IRC) Codes do not refer to the American Wood Protection Association (AWPA) standards for fire-retardant-treated wood (FRTW). Occasionally some construction specifications reference two standards: *C20 Structural Lumber – Fire Retardant Treatment by Pressure Process*, and *C27 Plywood – Fire Retardant Treatment by Pressure Process or U1 appendix H of the Use Category System*. Revisions of the AWPA Commodity standards after 1993 and U1 appendix H contains language prohibited in ICC code references and are therefore not recognized in the IBC or IRC. Since the development of the International Codes, the requirements for FRTW products have increased beyond the AWPA Standards.

These building codes require that when tested in accordance with ASTM E84 - *“Standard Test Method for Surface Burning Characteristics of Building Materials,”* FRTW shall have a flame spread of 25 or less, and show no evidence of significant progressive combustion when the test is continued for an additional 20-minute period. In addition, the flame front shall not progress more than 10½ feet beyond the centerline of the burners at any time during the test.

In accordance with code requirements:

- The identification mark of an approved agency
 - Identification of the manufacturer
 - Name of the treatment
 - Species of wood
 - Flame Spread and Smoke Developed index
 - Method of drying
 - If classified as EXTERIOR, the words, “No increase in the listed classification when subjected to the Standard Rain Test”

- Strength Adjustments, Interior FRTW:
 - o Plywood: test in accordance with ASTM D5516 and develop adjustment factors, maximum loads and spans or both using ASTM D6305.
 - o Lumber: test in accordance with ASTM D5664 and develop design value adjustments using ASTM D6841.

- Exposure to weather, damp or wet locations:
 - o EXTERIOR fire-retardant treatment: materials shall show no increase in the listed classification when tested (E84) after ASTM D2898 - "Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing."

- Interior Applications: Interior fire retardant treated lumber and plywood shall have moisture content of not over 28% when tested in accordance with ASTM D 3201 at 92% relative humidity.

- Moisture Content – Fire retardant treated wood shall be dried after treatment to moisture content of 19% for lumber and 15% for plywood.

- Third Party Inspection: The codes require that fire retardant treated lumber and plywood shall be manufactured in accordance with established standards for treating and redrying, by an independent third party inspection agency (such as Underwriters Laboratories, UL).

For PyroGuard® or ExteriorFireX® product specifications, go to www.frtw.com or call 1-800-832-9663.