



- Multifamily
- Residential
- Commercial
- Custom Upmarket
- Government
- Mixed Use



## FREQUENTLY ASKED QUESTIONS:

- 1. What is FRTW?** International Building Code, Section 2303.2, defines fire-retardant-treated wood (FRTW) as: "Wood products impregnated with chemicals by a pressure process."
- 2. What is a pressure process?** IBC § 2303.2.1 defines pressure process as: "For wood products impregnated with chemicals by a pressure process, the process shall be performed in closed vessels under pressures not less than 50 pounds per square inch gauge (psig) (345 kPa)."
- 3. Do I need to use FRTW?** It depends. In a designated WUI (Wildland Urban Interface) zone where the IWUIC (International Wildland Urban Interface Code) has been adopted, along with the 2018 IBC, if using wood building products, then an ignition resistant FRTW is required by code. If you are building in a non-WUI zone, or where the IWUIC has not been adopted then it is not required but may be selected by other codes, design considerations, or the client.
- 4. Can I use a fire-retardant spray, coating, or paint?** It depends. In a designated WUI zone where the IWUIC has been adopted, the answer is no. The 2018 edition of the IBC clarifies what is allowed in Section 2303.2.2: "The use of paints, coating, stains or other surface treatments is not an approved method of protection as required in this section."
- 5. Can I stain or paint FRTW?** Yes. However, please consult SaferWood-Chemco for recommendations. Our proprietary fire retardant, Thermex-FR, is formulated to be ignition-resistant and is the only pressure impregnated fire-retardant to successfully pass a 10-year outdoor weathering test. The very nature of our ability to prevent the spread of flame and smoke, and extend weathering, also means choosing the correct stain, paint, or coating for proper compatibility.
- 6. Is thermally modified wood WUI compliant?** In most cases, no. To be fully compliant with IBC and IWUIC, an ignition-resistant wood building material must pass an extended fire-test for a total duration of 30 minutes. Outside a WUI zone or where the IWUIC has not been adopted a thermally modified wood product that has passed a 10-minute fire-test is acceptable for use. It is important to confirm two things: 1) most recent code adopted, and 2) WUI designation.
- 7. Can you treat Glulam and CLT?** Yes. If it can fit in our tube, then we can treat it. Max size: 4 ft wide x 50 ft long.
- 8. Isn't ASTM E84/UL 723 a Class A rating?** Yes and no. ASTM E84/UL 723 is a Class A rating but to achieve this a wood building product must only pass a 10-minute fire-test. IBC and IWUIC ignition-resistant FRTW must pass an extended 20-minute fire-test for a total duration of 30-minutes. Essentially, achieving better than Class A. It is critical to understand this distinction and verify any product claiming to be WUI compliant and Class A has passed the extended 30-minute fire-test for flame spread and smoke development, and this is only performed after ASTM D2898 Accelerated Weathering.
- 9. What is ASTM D2898 Accelerated Weathering?** Fire-retardant-treated products for exterior applications must be subjected to actual or accelerated weathering prior to fire testing. Sometimes referred to as the "800-inch rain test," the ASTM D2898 test has two methods to simulate weathering. Method A subjects the materials to 12 one-week condition cycles of 96 hours of water exposure and 72 hours of drying at 140 degrees F, the equivalent of 800 inches of rainfall over 12 weeks. Method B subjects materials to 1,000 hours of 24-hour exposures featuring four hours of wetting, four hours of drying and eight hours of resting, with drying time at 150 degrees F with continuous UV exposure.
- 10. So, what is required for fully WUI compliant wood building materials?**
  - a. Ignition resistant per IWUIC Section 503.2, Item 3, FRTW
  - b. Fire retardant pressure treatment per IBC 2303.2.1
  - c. ASTM E2768-11 Fire-Test-Response Extended 30 Minutes per ASTM E84/UL 723
  - d. ASTM D2898-10 Accelerated Weathering per ASTM E84/UL 723
  - e. Kiln-dried after treatment (KDAT) per IBC 2303.2.8 for moisture content
  - f. Certification by an independent third-party quality control agency with IAS accreditation, i.e., ICC, ICC-ES, UL.

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