

## Commercial Construction Benefits Using D-Blaze Fire Retardant Treated Wood

D-Blaze® treated lumber and plywood are designed for interior applications where fire retardant construction materials are specified or required by the building code. D-Blaze is highly effective at slowing down the spread of flame and reducing smoke development as a result of fire. The fire retardant chemicals are pressure treated deep into the wood and locked into the wood fibers for lasting protection.

By comparison, spray-on fire-retardant applications are inherently vulnerable because the chemical treatment is limited to the wood's surface. Protection can be compromised by scratches and abrasions that can easily occur during normal distribution and job-site handling. Even with spray-on treatments that are applied on the job-site, variations in treatment can result in poorly protected areas of the project. Additionally, not all spray-on products have passed the same **extended 30-minute** ASTM E 84 test for flame spread.

Fire-retardant materials are required in construction specifically to increase the time for people to evacuate and reach safety. D-Blaze FRTW slows the combustion cycle by forming a protective layer of char, hindering flame spread and smoke formation, increasing evacuation time and potentially reducing damages and subsequent repair costs.

### **D-Blaze FRTW may also reduce costs in these applications:**

- Roof decking may be accepted in lieu of parapet walls in multi-family dwellings.
- Wood partitions may allow for an increase in square footage and lower insurance rates.
- Commonly accepted by building codes for partition walls, store fronts, fixtures and roof construction in shopping centers
- May reduce or even eliminate the requirement for installed sprinkler systems

### **Product Features**

- UL® Class A (Class 1) with FR-S Rating
- GREENGUARD GOLD certified
- Code compliant FRT plywood and lumber
- ICC ESR-2645
- Very low smoke rating
- Workable with common wood-working tools
- Interior Type A High-Temperature (HT) FRTW per AWWA UCFA
- Low-corrosivity
- Low-hygroscopicity
- No VOCs or formaldehyde
- Non-blooming
- 50-Year Limited Warranty
- **FSC Chain of Custody** - Many of the treating facilities that use Viance preservative products have obtained a FSC Chain of Custody certification. Verification can be obtained at <http://info.fsc.org>.
- **Harvesting/Extraction** - Lumber and plywood are grade marked by the manufacturer providing traceability to the mill location. Extraction points are not traceable for non-FSC material.
- **LEEDv4** contribution points can be derived from sourcing of raw materials, regional priority, and low-emitting materials.

### **Common Applications**

- **Roofs and Attics:** trusses, plywood sheathing, decks and rafters
- **Walls:** load-bearing and partition, plywood sheathing and studs
- **Flooring:** subfloors, joists, plywood sheathing, studs and trusses
- **Other structural uses:** stairways, steps, beams, blocking, and paneling

D-Blaze used in the construction of the One World Trade Center in NYC, NY



## Approvals

- D-Blaze® FRT wood meets the established IBC, IRC, NFPA and UL testing requirements for use in construction applications where FRTW products may be used.

Testing	Approvals
<ul style="list-style-type: none"> <li>ASTM E 84</li> <li>ASTM D 3201</li> <li>ASTM D 5516</li> <li>ASTM D 5664</li> </ul>	<ul style="list-style-type: none"> <li>ICC-ES ESR 2645</li> <li>Underwriters Laboratories® Classified UL® Class A (Class 1) with FR-S Rating</li> <li>CAN/ULC S102 and S102.2</li> <li>GREENGUARD GOLD and GREENGUARD Certified</li> <li>National Fire Protection Association (NFPA 255)</li> <li>City of Los Angeles Research Report: RR 24502</li> <li>New York City Building Code (MEA Numbers 406-87 and 407-87)</li> <li>National Building Code of Canada</li> <li>AWPA Standardized (P50, U1, UCFA) Interior Type A High-Temperature (HT) FRTW</li> <li>California Department of Forestry and Fire Protection CSFM BML Listings for D-Blaze Plywood and Lumber</li> </ul>

## Testing Regimens

- For each approved wood species, D-Blaze FRTW exhibited a flame spread and smoke developed index of 25 or less under ASTM E 84 flame tunnel testing for an extended 30-minute duration without showing evidence of significant progression of combustion. D-Blaze has a very low smoke rating.
- D-Blaze FRTW has been tested by independent laboratories following industry standards ASTM D 5516 and ASTM D 5664 to develop strength reduction factors for various use conditions, including roof temperatures of up to 150° F for lumber and 170° F for plywood. Consult D-Blaze Technical Brochure for Lumber and Plywood Strength Design Adjustment Factors.
- D-Blaze FRTW has been tested for hygroscopicity in accordance with ASTM D 3201, resulting in classification of D-Blaze as an interior Type A (HT) fire-retardant wood as defined in AWPA Standards (UCFA).
- D-Blaze FRTW is regularly inspected by UL® and also ALSC accredited agencies such as TP and SPIB to ensure quality control of both treatment levels and kiln-drying after treatment.

## Job Site Storage

D-Blaze FRTW must be kept dry during transit and on the job-site by covering the top of the bundle, storing the material under shelter, elevating the bundle from ground contact, and allowing for air circulation around the wood. Roof sheathing should be covered as soon as practical after installation. If D-Blaze FRTW becomes wet during construction, allow to dry before enclosing or covering with roofing material.

## Non-Corrosive

The corrosivity of D-Blaze FRTW is lower than the maximum allowed by industry and governmental standards. Hot-dipped galvanized steel fasteners or stainless-steel fasteners are recommended, and all fasteners should meet or exceed local code requirements.

## Safety and Handling

D-Blaze pressure-treated products do not contain any EPA-listed hazardous chemicals and are easy to work with, requiring no special precautions other than routine wood working safety procedures. When working with or machining D-Blaze pressure-treated wood, the following minimum safety precautions should be followed:

- Wear gloves to protect against splinters.
- Wear a dust mask when machining any wood to reduce the inhalation of wood dusts.
- Wear appropriate eye protection to reduce the potential for eye injury from wood particles and flying debris during machining.
- Wash thoroughly with mild soap and water after working with treated wood.
- Wood scraps should be disposed of in accordance with local waste management regulations.
- Refer to the latest D-Blaze Safety Data Sheet (SDS).

D-Blaze® Fire Retardant treated wood products are produced by independently owned and operated pressure treating wood facilities. \* See D-Blaze 50-Year Limited Warranty for details at Treatedwood.com. D-Blaze® and Viance® are registered trademarks of Viance, LLC. AWPA is a registered trademark of the American Wood Protection Association. UL is a registered trademark of the Underwriters Laboratories. All logos and trademarks are exclusive property of their respective owners. © Viance, LLC 2021. All rights reserved. 032021

