

ICC-ES Evaluation Report

ESR-3872

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DIVISION: 09 00 00—FINISHES

Section: 09 96 43—Fire-Retardant Coatings

REPORT HOLDER:

FIRE RETARDANT COATINGS OF TEXAS, LLC

EVALUATION SUBJECT:

FX LUMBER GUARD AND FX LUMBER GUARD XT FIRE-RETARDANT COATINGS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 2012, 2009 and 2006 *International Fire Code*® (IFC)
- 2012, 2009 and 2006 *International Existing Building Code*® (IEBC)

Property evaluated:

- Surface-burning characteristics

2.0 USES

FX Lumber Guard and FX Lumber Guard XT are fire-retardant coatings, as defined in IFC Section 803.4 that are field-applied by applicators approved by Fire Retardant Coatings of Texas, LLC, to exposed surfaces of unfinished Southern Yellow Pine dimensional lumber, Southern Yellow Pine plywood, or oriented strand board (OSB) rated sheathing Exposure 1 as an interior finish in the interior of new and existing construction to achieve the flame-spread and smoke-developed indices required by the applicable code.

3.0 DESCRIPTION

3.1 General:

FX Lumber Guard and FX Lumber Guard XT fire retardant coatings are clear, water-based products that come in 1-quart (1.0 L), 1-gallon (3.8 L), and 5-gallon (18.9 L) containers, 55-gallon (208 L) drums, and 250-gallon (946.4 L) totes. The products have a shelf life of three years from the date of manufacture when the containers are unopened and stored at temperatures between 45°F (7.2°C) and 95°F (35°C).

4.0 INSTALLATION

4.1 General:

FX Lumber Guard and FX Lumber Guard XT must be installed in accordance with this report, the manufacturer's published installation instructions and the applicable code. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

The surface to be coated must be free of dust, dirt, oil, paint, stain, varnish, or sealant. The products are not for use on surfaces that may be subjected to washing or sustaining humidity of 80 percent or more. The products must be thoroughly mixed before and throughout the application and applied by manual-pump spraying, rolling, or brushing in one coat. The ambient air temperature for application must be limited to a minimum of 45°F (7.2°C) and maximum of 95°F (35°C). The maximum moisture content for the substrate is 15 percent for dimensional lumber, 19 percent for plywood, and 16 percent for oriented strand board (OSB). The cure time for the fire-retardant coating can be a minimum of 8 hours to a maximum of 32 hours. The performance of products with overcoating layers is outside the scope of this report.

4.2 Application and Surface-Burning Characteristics:

When applied to unfinished Southern Yellow Pine dimensional lumber, Southern Yellow Pine plywood, or oriented strand board (OSB) rated sheathing Exposure 1 at a minimum coverage rate of 300 square feet per gallon (7.36 m²/L), the products provide a flame-spread-index of 25 or less and a smoke-developed index of 200 or less when tested in accordance with ASTM E84 and qualifies as a Class A finish in accordance with IBC Section 803.1.1, IFC Section 803.1.1 and NFPA 703.

4.3 Field Test:

When required by the code official, observation of the coating or field testing must be conducted in accordance with one of the following methods:

4.3.1 Observation: Observing the presence of a distinctive color (green, red or orange) dye after application.

4.3.2 Field Test: For coatings without dye, expose the coated substrate to a small fire source, such as a propane torch. The flame exposure must be applied for a maximum of 15 seconds to a treated substrate and an untreated substrate. Evidence of a treated substrate is observed by comparing the reactions to the flame where the treated substrate will form a visible black char layer.

5.0 CONDITIONS OF USE

The FX Lumber Guard and FX Lumber Guard XT fire retardant coatings described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 Installation must comply with this report, the manufacturer's published instructions, and the applicable code. In the event of a conflict between the manufacturer's published installation instructions and this report, this report governs.
- 5.2 Application must be limited to construction of the specific substrate set forth in Section 2.0, to exposed interior locations having a sustaining humidity of less than 80 percent.
- 5.3 Field testing must be performed by the approved applicator, as indicated in Section 4.3, when required by the code official.
- 5.4 The manufacturer's Certificate of Fire Retardant Treatment (COT), as shown in Figures 1 and 2, must be submitted by the approved applicator to the code official describing the material treated; the location of the treated materials; product batch number or order number, including the square footage of the area treated; and the application rate.
- 5.5 Special inspections may be required when determined to be necessary by the code official in accordance with Section 1705.1.1 of the 2012 IBC or Section 1704.15 of the 2009 IBC, or Section 1704.13 of the 2006 IBC, as applicable.

5.6 The performance of products with overcoating layers is outside the scope of this report.

5.7 The coatings are manufactured in Haslet, Texas, under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with ICC-ES Acceptance Criteria for Surface-applied Fire-retardant Coatings (AC363), dated February 2007 (editorially revised April 2014).

7.0 IDENTIFICATION

7.1 Containers of FX Lumber Guard and FX Lumber Guard XT fire retardant coatings are identified by the label bearing the manufacturer's name (Fire Retardant Coatings of Texas, LLC) and address, the product name, the date of manufacture, shelf life, the manufacturer's instructions for application, and the ICC-ES evaluation report number (ESR-3872).

7.2 The report holder's contact information is the following:

FIRE RETARDANT COATINGS OF TEXAS, LLC
1150 BLUE MOUND ROAD WEST, SUITE 403
HASLET, TEXAS 76052
(817) 710-5233
www.frctexas.com



Fire Retardant Coatings of Texas®, LLC
 1150 Blue Mound Rd West #403 • Haslet, Texas 76052
 Office (817) 710-5233 Fax (817) 439-8385
 www.frctexas.com



FX LumberGuard®

Certificate of Fire-Retardant Wood Treatment Labeling

To: _____ Date of Service: _____

Batch Code or Order No.: _____

This is to certify that the material described below was treated with FX Lumber Guard and has been applied in conformance with FRCT's application specifications, ICC-ES ESR 3872, ICC-ES ESL-1087, and ICC-ES ESL-1064.

Description of material treated:

Square/Board Foot Treated: _____ Spread Rate: 300-350 square feet per gallon
 Species Treated: _____


Applicator / Treater:
 Name: _____
 Address: _____
 City: _____ ST: _____ ZIP: _____
 Phone: _____

Applicators Signature: _____




"Fire Retardant Coatings of Texas", "FX Lumber Guard / FX Lumber Guard XT" & "FRCT" Logo are federally registered trademarks of Fire Retardant Coatings of Texas, LLC

FIGURE 1—EXAMPLE OF CERTIFICATE OF TREATMENT (COT) FOR FX LUMBER GUARD



Fire Retardant Coatings of Texas, LLC
 1150 Blue Mound Rd West #403 • Haslet, Texas 76052
 Office (817) 710-5233 Fax (817) 439-8385
 www.frctexas.com



FX LumberGuard® XT

Certificate of Fire Retardant Wood Treatment

To: _____ Date of Service: _____

Batch Code or Order No.: _____

This is to certify that the material described below was treated with FX Lumber Guard XT and has been applied in conformance with FRCT's application specifications, ICC-ES ESR-3872, ICC-ES ESL-1087, and ICC-ES ESL-1064.

Your Invoice # _____ dated _____ 20____.

Description of material treated:

Square Foot Treated: _____ Spread Rate: 300-350 square feet per gallon

Applicator:


Name: _____

Address: _____

City: _____ ST: _____ ZIP: _____

Phone: _____

Applicators Signature: _____



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FIGURE 2—EXAMPLE OF CERTIFICATE OF TREATMENT (COT) FOR FX LUMBER GUARD XT