# DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES SECTION 06 05 73.13

#### SAFERWOOD FIRE-RETARDANT WOOD TREATMENT

#### PART 1 GENERAL

## 1.1 CATEGORY

- 1.1.1 Pressure Treated Fire-Retardant-Treated Wood (FRTW)
  - 1.1.1.1 This section pertains to fire-retardant treatment of lumber and plywood.

## 1.2 RELATED SECTIONS

- 1.2.1 Section 06 10 00 Rough Carpentry.
- 1.2.2 Section 06 15 00 Wood Decking.
- 1.2.3 Section 06 20 00 Finish Carpentry.

#### 1.3 REFERENCES

- 1.3.1 ASTM International (ASTM):
  - 1.3.1.1 ASTM D2898 Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood.
  - 1.3.1.2 ASTM D3201 Standard Test Method for Hygroscopic Properties of Fire-Retardant Wood and Wood-Base Products.
  - 1.3.1.3 ASTM D5516 Standard Test Method for Evaluating the Flexural Properties of Fire-Retardant Treated Softwood Plywood Exposed to Elevated Temperatures.
  - 1.3.1.4 ASTM D5664 Standard Test Method for Evaluating the Effects of Fire-Retardant Treatments and Elevated Temperatures on Strength Properties of Fire-Retardant Treated Lumber.
  - 1.3.1.5 ASTM D6305 Standard Practice for Calculating Bending Strength Design Adjustment Factors for Fire retardant Treated Plywood Roof Sheathing.
  - 1.3.1.6 ASTM D6841 Standard Practice for Calculating Design Value Treatment Adjustment Factors for Fire-Retardant-Treated Lumber.
  - 1.3.1.7 ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
  - 1.3.1.8 ASTM E2768 Standard Test Method for Extended Duration Surface Burning Characteristics of Building Materials (30 min Tunnel Test).
- 1.3.2 American Wood-Preservers' Association (AWPA)
  - 1.3.2.1 AWPA E12 Standard Method of Determining Corrosion of Metals in Contact with Treated Wood.
- 1.3.3 International Code Council (ICC)
  - 1.3.3.1 International Building Code (IBC)
  - 1.3.3.2 International Residential Code (IRC)
  - 1.3.3.3 International Wildland Urban Interface Code (IWUIC)
- 1.3.4 ICC Evaluation Service (ICC-ES)
  - 1.3.4.1 ICC-ES Acceptance Criteria AC66 Acceptance Criteria for Fire-Retardant Wood.
- 1.3.5 Military
  - 1.3.5.1 MIL-L-19140E Lumber and Plywood, Fire Retardant Treated
- 1.3.6 Underwriters Laboratories (UL)
  - 1.3.6.1 UL 723 Test for Surface Burning Characteristics of Building Materials.

## 1.4 QUALITY CONTROL

## 1.4.1 ICC-ES Evaluation Report

Provide appropriate current evaluation report stating compliance with AC66 for exterior fire-retardant-treated plywood and lumber in accordance with ISO 17065.

# 1.4.2 Third-party Inspection Service

Provide evidence of ongoing quality assurance surveillance by an IAS approved inspection agency in accordance with ISO 17020.

## 1.5 DELIVERY, STORAGE, AND HANDLING

## 1.5.1 Delivery of FRT Lumber

Deliver the fire-retardant-treated lumber in the sizes and quantities indicated and at the construction scheduled times. Packaged or wrapped materials are to be in their original, undamaged wrapping, bearing label clearly identifying manufacturer's name, grade, and species of lumber, and other pertinent data. Use nonmarring slings for loading, unloading, and handling members to prevent damage to surfaces or wrapping.

# 1.5.2 Delivery of FRT Plywood

Deliver the fire-retardant-treated plywood in the quantities indicated and at the construction scheduled times. Packaged or wrapped materials are to be in their original, undamaged wrapping, bearing label clearly identifying manufacturer's name, grade, and species of plywood, and other pertinent data. Use nonmarring slings for loading, unloading, and handling members to prevent damage to surfaces or wrapping.

# 1.5.3 Storage and Handling of FRTW

Store wrapped materials in their original wrapping until ready for installation. Place members on level supports off ground, spaced and braced to allow through ventilation. Cover wood and keep free of dirt, grease, moisture, or foreign matter that could cause staining.

#### 1.6 WARRANTY

- 1.6.1 Warranty Period
- 1.6.2 Description and Coverage

## PART 2 PRODUCTS

#### 2.1 MANUFACTURER

- 2.1.1 Chemco, Inc., P.O. Box 895, Ferndale, WA 98248, (360) 366-3500
- 2.1.2 FSR Treatment, Inc., 9486 288<sup>th</sup> Street, Maple Ridge, British Columbia, V2W 1L1, Canada

# 2.2 MATERIALS

#### 2.2.1 FRT Lumber

List here species [Douglas Fir, Southern Pine (structural grade only), Spruce-Pine-Fir, Western Red Cedar, Redwood, or Western Hem Fir], grade [common or structural], and quantity for each size requested. All fire-retardant-treated under the name [SaferWood-FX, Thermex-FR, FRX, Mataverde (only available for structural grade Western Hem-Fir), Flame Repel, or Fireline] and treated for [Interior or exterior] application.

## 2.2.1 FRT Plywood

List here species [Douglas Fir, Southern Pine, Spruce-Pine-Fir, Western Red Cedar, Redwood, or Western Hem Fir], grade [Structural I], and quantity for each thickness and size requested. All fire-retardant-treated under the name [SaferWood-FX, Thermex-FR, or FRX] and treated for [Interior or exterior] application (only exterior graded plywood can be treated for exterior applications).