1 & 2 HOUR TESTED INTERIOR WALL ASSEMBLIES

**1 Hour Tested Interior Wall Assembly (ASTM-E1 19)**
- Max. Tested Load: 100% of Design Load
- Fire Ratings: 1 hour, load bearing rated from one side (interior side only). For details refer to ESIR Report 424.
- **Fireproofing Requirements**:
  - 1. Drywall
  - 2. FlamePRO Fire Retardant Treated Plywood
  - 3. Insulation
  - 4. FlamePRO Fire Retardant Treated Lumber
  - 5. Exterior Facings (Required): Brick Veneer, 3/4" Cement Plaster (Stucco), Cement Fiber Siding

**2 Hour Tested Interior Wall Assembly (ASTM-E1 19)**
- Max. Tested Load: 100% of Design Load
- Fire Ratings: 2 hour, load bearing rated from one side (interior side only). For details refer to ESIR Report 424.
- **Fireproofing Requirements**:
  - 1. Drywall
  - 2. FlamePRO Fire Retardant Treated Plywood
  - 3. Insulation
  - 4. FlamePRO Fire Retardant Treated Lumber
  - 5. Exterior Facings (Required): Brick Veneer, 3/4" Cement Plaster (Stucco), Cement Fiber Siding

**1 & 2 HOUR TESTED EXTERIOR WALL ASSEMBLIES**

**1 Hour Tested Exterior Wall Assembly (ASTM-E1 19)**
- Max. Tested Load: 100% of Design Load
- Fire Ratings: 1 hour, load bearing rated from one side (interior side only).
- **Fireproofing Requirements**:
  - 1. Drywall
  - 2. FlamePRO Fire Retardant Treated Plywood
  - 3. Insulation (1 hr from exterior face)
  - 4. FlamePRO Fire Retardant Treated Lumber
  - 5. Exterior Facings (Required): Brick Veneer, 3/4" Cement Plaster (Stucco), Cement Fiber Siding

**2 Hour Tested Exterior Wall Assembly (ASTM-E1 19)**
- Max. Tested Load: 100% of Design Load
- Fire Ratings: 2 hour, load bearing rated from one side (interior side only).
- **Fireproofing Requirements**:
  - 1. Drywall
  - 2. FlamePRO Fire Retardant Treated Plywood
  - 3. Insulation (1 hr from exterior face)
  - 4. FlamePRO Fire Retardant Treated Lumber
  - 5. Exterior Facings (Required): Brick Veneer, 3/4" Cement Plaster (Stucco), Cement Fiber Siding

**IMPORTANT INFORMATION**
- **100% of Design Load**
- **Max. Tested Load**

**FlamePRO Fire Retardant Treated Wood**
- **FlamePRO Plywood**
- **FlamePRO Lumber**

**For more information, call 800-585-5161 or visit www.kopperspc.com**

Chemicals are as set forth in the “FlamePRO Limited Warranty Agreement”.

For a complete specification call Koppers Performance Chemicals at 800-585-5161.

For example, refer to the FlamePRO Specifications and the FlamePRO Limited Warranty Agreement. The only warranties made by Koppers Performance Chemicals are as set forth in the “FlamePRO Limited Warranty Agreement”.

Use fire retardant treated wood safely. Always read the label and product information before use.

Mold growth can and does occur on the surface of many products, including untreated and fire retardant treated wood, during prolonged surface exposure to excessive moisture conditions. To remove mold from the treated wood surface, wood should be allowed to dry. Typically, mild soap and water can be used to remove remaining mold residue. If mold growth cannot be prevented, consider removing the finished product and replacing with untreated or defect-free wood. For details refer to ESR Report 4244.

**IMPORTANT INFORMATION** (continued)
- **For details refer to ESR Report 4244.**
FlamePRO brand fire retardant treated lumber is available in a wide range of species including:
- Southern Pine (Western Whitewood, Loblolly Pine, Spruce-Fir, Red Pine, Yellow Pine)
- Doug Fir
- Red Cedar
- Pine
- Abies

SPECIFICATION

FlamePRO fire retardant treated wood is available in Southern Pine and Douglas Fir.

CORROSIVITY

FlamePRO fire retardant treated wood has been evaluated in accordance with ASTM Standard E326 for a variety of metals. The corrosion rates for carbon steel, galvanized steel, aluminum, and copper are not significantly increased by FlamePRO brand fire retardant chemicals when the treated wood products are used as recommended by the manufacturer and properly sized for the materials selected.

HYDROSCOPICITY

Hydroscopcity testing conducted by a third party independent laboratory has confirmed that compared to untreated wood, FlamePRO brand fire retardant treated wood has a moisture content no greater than 0.5% once conditioned in accordance with ASTM E765-97 standard.

INSTALLATION

Structural systems which include FlamePRO brand fire retardant treated material should be designed and installed in accordance with the latest and most stringent variations of the American Wood Council (AWC) Building and design span tables and building systems. Following the installation, FlamePRO fire retardant treated wood should be able to be finished in accordance with the 2006 IRC; and the evaluation report number (ESR-4244).

Identification

Lumber and plywood treated with FlamePRO fire retardant formulae must be identified by the structural engineer or architect for proper and timely recognition by the designated project owner. Contact FlamePRO’s sales representative, Timber Products Inspection, Inc. (AC-66); Southern Pine Inspection Bureau, Inc.; or the appropriate state inspection agency Underwriters Laboratories (FR-S).

TESTING AND STANDARDS

All FlamePRO fire retardant treated wood products are tested in accordance with the following standards:
- ASTM E119 - Fire Tests of Building Construction
- ASTM 2768 – Extended 30-minute Test
- UL 723 - Surface Burning Characteristics
- UL 1709 - Fire Tests for Building Assemblies
- UL 1901 - Rate of Fire Spread in Building Assemblies
- UL 1959 – Fire Tests on Building Assemblies
- UL 1990 – Fire Tests in Building Assemblies
- UL 2643 – Rate of Fire Spread in Building Assemblies
- UL 2869 – Fire Tests for Building Assemblies
- UL 2903 – Fire Tests for Building Assemblies
- UL 2911 – Fire Tests for Building Assemblies
- UL 2912 – Fire Tests for Building Assemblies

Specifications

Lumber: FlamePRO products are treated with a water-based solution of FlamePRO fire retardant chemicals, which, when the treated wood products are used as recommended by the manufacturer and properly sized for the materials selected.

Stud: FlamePRO products are treated with a water-based solution of FlamePRO fire retardant chemicals, which, when the treated wood products are used as recommended by the manufacturer and properly sized for the materials selected.

Plywood: FlamePRO products are treated with a water-based solution of FlamePRO fire retardant chemicals, which, when the treated wood products are used as recommended by the manufacturer and properly sized for the materials selected.

TABLE 1 – STRUCTURAL DESIGN VALUES FOR FlamePRO® FIRE RETARDANT TREATED LUMBER COMPARED TO UNTREATED LUMBER APPLICABLE AT SERVICE TEMPERATURES UP TO 100°F (38°C)

<table>
<thead>
<tr>
<th>Species</th>
<th>Modulus of Rupture (MOR)</th>
<th>Tensile Strength (UTS)</th>
<th>Shear Strength</th>
<th>Modulus of Elasticity (MOE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Pine (Western Whitewood, Loblolly Pine, Spruce-Fir, Red Pine, Yellow Pine)</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
</tr>
<tr>
<td>Doug Fir</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
</tr>
<tr>
<td>Red Cedar</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
</tr>
<tr>
<td>Pine</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
</tr>
<tr>
<td>Abies</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
</tr>
</tbody>
</table>

TABLE 2 – STRENGTH DESIGN FACTORS FOR FlamePRO® FIRE RETARDANT TREATED LUMBER COMPARED TO UNTREATED LUMBER APPLICABLE AT SERVICE TEMPERATURES UP TO 100°F (38°C)

<table>
<thead>
<tr>
<th>Species</th>
<th>Strength Design Factor</th>
<th>Strength Design Factor</th>
<th>Strength Design Factor</th>
<th>Strength Design Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Pine (Western Whitewood, Loblolly Pine, Spruce-Fir, Red Pine, Yellow Pine)</td>
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<td>0.80</td>
</tr>
<tr>
<td>Abies</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Note: For other load conditions, contact manufacturer.

For Climate Zone definitions, please refer to the Climate Zone table in the FlamePRO Fire Retardant Treated Wood Product Data Sheet.

Assemblies

Electrical Panels

Span Rating

The FlamePRO Fire Retardant Treated Wood Product Data Sheet is available at www.kopperspc.com or by contacting FlamePRO Consumer Affairs, P.O. Drawer O, Griffin, Georgia 30224-0249.