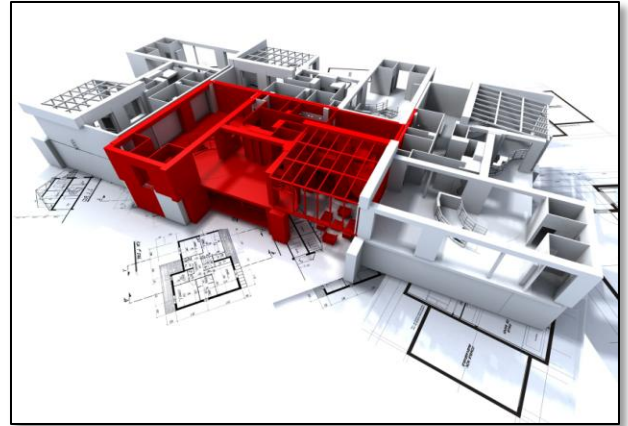


Fire Code and Flame Retardants

Code compliance is a top priority at every stage in a project – architects, designers, specifiers, builders and construction teams must balance function, aesthetics, budget, and timeframes with a variety of regulations and standards. The impact of oversights and mistakes can be disastrous: in the best case, delays and increased costs; in the worst case, property damage and endangering public safety.



To navigate the regulatory complexities, a Project Team must carefully plan for AHJ review and assessment in order to minimize potential inspection or implementation problems.

Flame Retardants – Across Construction Applications

Lumber, sheathing, interior finishes, fixtures... each aspect is defined local, state and international fire, building, electrical, plumbing, or health codes while adhering to UL, Life Safety, and NFPA standards.

In every case, the proper flame retardant can help your team to:

- Lower Costs
- Increase options of Materials
- Comply with Codes
- Pass Inspection

Confined Spaces

NFPA 13 allows for the omission of sprinklers in well-defined spaces based on access, fuel load, and building materials. Fire retardant treated wood with a Class A rating under ASTM E84 testing in accordance with NFPA 703 complies with this requirement.

*Benefits of **CODEpliance** flame retardant treatment:*

- Sprinkler installation \$.70-.80/sf. Flame retardant treatment: \$.45-60/sf. Average 25% cost savings
- Lower costs of building materials by using standard lumber and plywood
- Treatment is inherently mildew, mold and insect resistant – eliminate additional preventative treatments
- None of the historical corrosion from FR leading to failure of standard web-plates and trusses
- Avoid risk of accidental sprinkler activation or water damage

Interior Finishes

NFPA, IBC, and IFC Codes are the foundations for many State and local Building and Fire codes. Within each code is a section dictating flame-spread ratings of interior finishes by Building Use and Occupancy and the presence of a sprinkler system.

*Benefits of **CODEpliance** flame retardant treatment:*

- Achieve Class A or Class B ratings (depending upon code requirements) for interior wall or ceiling finish
- Increase options of off-the-shelf or custom-milled decorative trim application
- Can be painted with water-based clear-coats or latex paints of your choice without impacting rating

(over ➔)

Building Materials

Fire-resistance ratings and Flame-spread ratings are two separate things. Fire-resistance refers to assemblies (doors, ceilings, floors or walls) and includes all components (gypsum, lumber, plaster, channels, etc) in the final hourly rating. Flame-Spread ratings and Smoke Developed Index (SDI) measures a material's ability to sustain a flame and the level of smoke emitted using the ASTM E84 "tunnel test" over 10 minutes. For building materials this test is extended to 30 minutes (ASTM E2768), the maximum approval standard for wood alone.

*Benefits of **CODEpliance** flame retardant treatment:*

- Achieve 30-minute, Class A rating on standard framing lumber and plywood
- Post-build treatment ensures comprehensive coverage of all exposed surfaces, cuts, and joints
- Protective intumescent layer between fire and wood to maintain structural integrity and load-bearing
 - * Pressure-treated FRT wood requires fire to interact with treated fibers and damage wood integrity
- Non-toxic formulation lowers toxic smoke released - the leading cause of injury and death

Safe and Effective flame retardants with **CODEpliance**

Flame retardants have a long history of trading one problem for another and garnered global criticism for it. Achieving fire safety DOES NOT require the use of toxic carcinogens or environmentally destructive chemicals.

<i>Non-toxic, food-grade components:</i>	Safe for use in residential, commercial, and industrial applications; baby nursery through high-traffic entertainment venue
<i>Biodegradable, environmentally "green":</i>	Harmless to surrounding wildlife, and foliage; LEED-friendly products, equipment and services.
<i>Confirmed results:</i>	Class A rating for both Flame Spread and Smoke Developed Index; Mitigates toxic gases released with exposure to heat
<i>Difficult Surfaces:</i>	Effective on wood, thatch, bamboo, rubber foam, cork, paper, and exterior-grade fabrics (umbrellas, awnings)
<i>Broad customer base:</i>	Includes restaurants, hotels, day-cares, schools, hospitals, assisted-living facilities, and personal residences
<i>Certified Lab approval:</i>	UL, NFPA, ASTM standards State agencies CA, NY and MA Office of Public Safety

Documentation

Tests, treatments, approvals, site schematics, and more - this creates a complex hardcopy and electronic paper-trail (product info, samples, results, certifications, permits, etc). A core aspect of the **CODEpliance** approach is to coordinate each step and digitally capture all of the information along the way, so it can be quickly retrieved for future inspections or alteration purposes.

Treatment Options

Every project has unique challenges, requirements, and changes, so flexibility is often as important as the individual products and services. **CODEpliance** is ready to meet your needs with on-site treatment, pre- and post-build application, direct distribution, or a combination of methods.

Maintenance

Many building materials and interior finishes require no on-going maintenance. For those items which DO require regular maintenance or recertification, (decorations, window treatments, furnishings) **CODEpliance** can help schedule a compliance program of cleaning, treatment, and recertification for continued good-standing.