





CanNTFIRE(CS11)-KFW is a water-based fire retardant coating solution that protects wood, bamboo, fiber material and concrete from fire and deterioration, extending the lifespan and durability of structures and components. Formulated with a proprietary blend of inorganic liquid solution primarily comprising nano silicates and a special modifier, it creates a penetrative clear coating that inhibits the spread of fire and reduces fire hazards of materials at construction sites and during use. It is non-toxic, odorless, and environmentally friendly, preserving the original colors and appearance of materials while reinforcing their fire retardant properties and enhancing durability.

### **Features**



- · Provides a barrier against flames
- Prevents the formation of mildew and fungi
- Reduces the penetration of oils, grease, and pollutants
- Penetrates into the materials while allowing for normal breathability
- Hardens the material surface, extending its life over time
- Protects against UV rays and provides excellent moisture protection
- Minimize natural expansion and retraction of materials in freezing weather
- · Does not alter the texture or natural colour of the materials
- Can be used with paint, stain, or varnish
- UV resistant
- Reduces impact from chemical attack

# **Properties**



Description	Performance
Composition	Proprietary blend of silicates in a water-based solution
Colour	Clear / Colourless
Organic properties	Odourless, colourless liquid
Flammability	Non-flammable
VOC Content	None
Environmental risk	None
Number of coating	1-2 coat(s)
Coverage rate	20-25m <sup>2</sup> /L (subject to application method and
	substrate surface roughness)
Shelf life	36 months in sealed container (5 - 32°C)
Curing	Dries to touch in 30 minutes and can be handled
	after 1 hour
Storage	Store at room temperature and keep away from
	glass and aluminum

# Application



- Surface preparation:
- No preparation required for new bare wood surfaces.
- Remove all previous treatments or paints for maximum penetration and effectiveness.

#### ■ Coating method:

- Apply at temperatures above 10°C.
- Do not dilute or mix with other liquids.
- Stir thoroughly before use.
- Apply evenly using brushes, rollers, or spraying with low-pressure pumps (max. 5 bar).
- · Apply from bottom upwards on vertical surfaces.
- For aged wood or maximum strength protection, wait 7-10 days between applying coats.
- Allow 24-48 hours to dry (crystallize) in a ventilated area.
- Allow 2-4 hours of drying time after application on hardwood floors.
- Excessive application will not penetrate the material.
  Avoid pooling the product on the material surface.
  Excess amounts must be removed with water and a scaping tool before it dries.
- Clean up with mild soap and water.

### ■ Following Application:

- Water-based product can be applied on top of CanNTFIRE after 24-48 hours. Other products can be applied on top of CanNTFIRE after 48 hours. Users are encouraged to test the product prior to application.
- CanSEALER-H9, a semi-penetrative top coat, can be applied on top of CanNTFIRE to minimize surface dirt and guard against scrapes if required.

#### Uses



- Structural elements of timber construction, including supports, trusses, attic spaces, and framing
- Solid hardwood flooring
- Timber decks, terraces, pergolas, furnishings, and fencing installations
- Architectural structures and ornamental finishes
- Outdoor storage sheds
- Window frames and balcony structures
- · Wooden planters and garden enclosures
- Artisanal woodcraft and sculptures
- Textiles and diverse surfaces requiring fire protection
- Metal or steel surfaces as fire retardant coating





Testing & Certificatio	n
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Description	Standards	Results
Fire test - Fire propagation	BS 476 Part 6:1989 + A1:2009 + C1:2014	Passed
Fire test - Surface spread of flame	BS 476 Part 7:1997 + AC:2014	Class 2

### **For Bamboo**







**For Fabric** 



**For Carpet** 

## **For Structural Timber**

# Packages

#### Manufacturer & Sole Agent CanaShield Nano-Technologies Inc. (Canada) CanaShield Nano-Technologies Ltd. (HongKong) Web: canashield.com

**Authorized Applicator** GreenWalls Bipengineering (HK) Ltd. Web: greenwalls.com.hk Email: ncpp@greenwalls.com.hk

## Cautions



- Cloudy white stains can appear if too much CanNTFIRE is applied; These can be removed with a slightly moist abrasive sponge.
- Protect glass and aluminium during application as they can be damaged by the product.
- Do not apply below 10°C or above 40°C.
- Do not apply when precipitation is forecast within 24 hours.
- Store at room temperature, keep away from glass and aluminium.



20L/pail

4L/jug

1L/bottle