



*Certified Sustainable Cable Maintenance*

# FS5 Ablative Cable Coating



*Water Based Ablative FM Approved Cable Coating for the fire protection of electrical cables up to 90 minutes.*





## DESCRIPTION

FS5 is a proprietary Ablative Cable Coating from Fire Security.

FS5 is a Type Approved water-based ablative coating for interior and exterior applications specially developed to stop fire from spreading on single, grouped or bundled electrical cables.

FS5 Cable Coating protects electrical cables through ablation as opposed to insulation. Energy is consumed to change a material from one condition or state to another.

FS5 Ablative fire protection coatings contain components which decompose when they absorb energy. On account of this decomposition, these coatings consume energy, thus protecting the substrate from fire as well as the environment of the fire, thanks to this cooling mechanism. When the decomposition temperature of the active components is reached, the fire protection effect begins spontaneously and continues until decomposition is fully completed.

## WHERE TO USE FS5

FS5 can be applied to interior and exterior electrical cables in industrial, marine and commercial projects or where cable protection is required to avoid spread of flame.

## THE WINNING ADVANTAGE

- Recognized as the Lowest DFT on the market
- Classified for up to 90 minutes Fire Rating
- Classified for up to 90 minutes Circuit Integrity
- Water based
- Non-Toxic Non-Hazardous
- LEED APPROVED (Zero VOC)
- Zero heat contribution
- Zero smoke
- Zero toxicity (wet, cured or under flame)
- Solvent, halogen and asbestos free
- Lightweight, thin-film application
- Cost effective for the customer and installer
- Applications worldwide
- Single component (stir and spray)
- Worldwide approvals



## WHY USE FS5

FS5 is the ideal solution for the protection of electrical cables from flame spread.

One of the main reasons for coating cables is to isolate the fire to its source and not let the fire spread from one area to another along the cable system.

FS5 also helps stop UV degradation of the cable sheath.

FS5 can also be used with Fire Security FS17, FS18 and FS23 repair solutions to permanently repair cracked sheaths extending the lifetime of the cable.

FS5 does not affect the current carrying capacity of the electrical cable, so there is no derating required.

FS5 will last the lifetime of the cable once applied.

## TYPICAL APPLICATIONS

FS5 is typically applied on the following

- New and existing electrical cables
- HV and LV / MV
- Data Cables / Fibre Optic Cables

FS5 can be applied to electrical cables in rooms and areas such as:

- Substations
- Cable Galleries
- Switch Rooms
- Battery Rooms
- Cable Basements
- Transformer Bays / Areas
- Motor Rooms

## PRODUCT DATA INFORMATION

**FS5 - fire rating up to 90 minutes**

### APPROVALS

FM Approval | IEC 60331-21 (90 Minutes) | IEC 60331-23 | DNV | BS476; Part 6 & 7 | BS 6853 D.8.4 | Non-Derating | BS6853-Zero Toxicity/ smoke/heat | LEED | Class 0 Approved | BS476, Part 20 (with FS21 Panel) | AS1530, Part 4 (with FS21 Panel).

### TRANSPORT / STORAGE

- Transport and store free from frost- preferably at a minimum of +5oC to a maximum of +35oC.
- Normal shelf-life of unopened pails: 24 month from date of manufacture.
- Opened pails must be re-sealed.

### PACKAGING

- 25 kg net weight (19 litres or 5 gallons)
- Plastic pails
- Other sizes on request

### SURFACE PREPARATION

Please refer to the Technical Data Sheet

### APPLICATION

Please refer to the Technical Data Sheet

### DRYING TIME

Please refer to the Technical Data Sheet

### TOP COATS

Please refer to the Technical Data Sheet

### SAFETY AND THE ENVIRONMENT

Please refer to the Technical Data Sheet

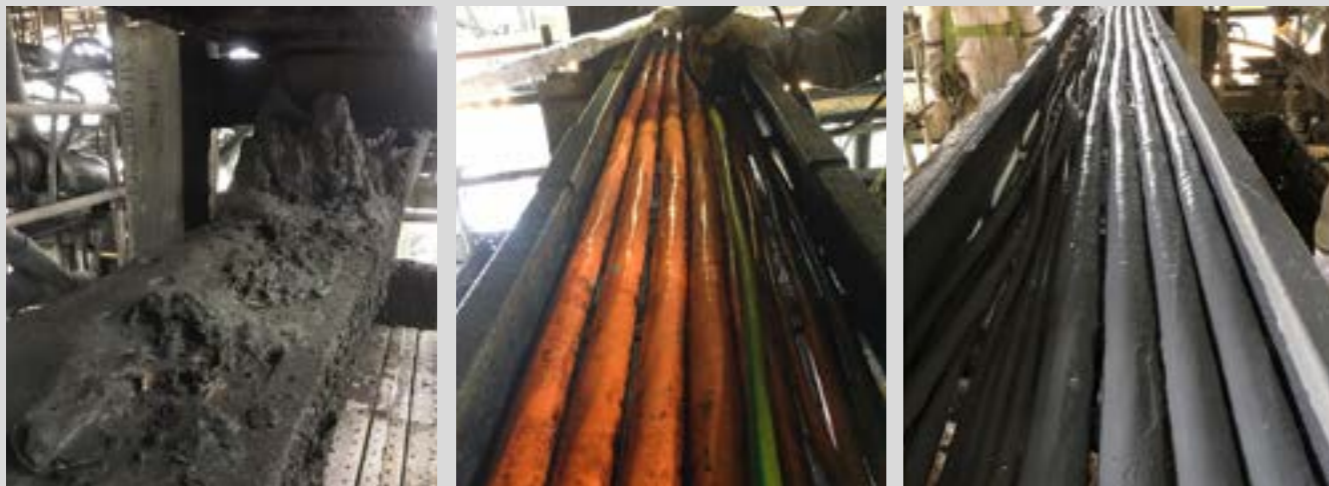






## Sustainable Cable Maintenance

*Protecting and prolonging the life span of electrical cables, FS has proven its worth for decades. We have an extensive reference list stretching from industrial plants, oil rigs and cruise ships to offshore wind farms. Our products are approved by leading classification societies and authorities. Our core activities are:*



*Using warranty backed applications only, FS repairs and upgrades damaged cables.*

### **Cable life extension**

The FS coating systems upgrade your cables and extend the lifetime by up to 3 times. No other fire protective cable coating is certified to be as resistant to UV, water, mud, oil, and a wide variety of damaging chemicals.

### **Cable repair**

We repair cable sheaths that are damaged by UV, oil, mud, and mechanical stress. The coating restores the cable value, prevents future damage to cables and cable jackets, and eliminates the need for large-scale replacement. This is done with minimum shutdown time.

### **Fire protection**

No other cable coating system has equal or better fire protection properties. Our coating provides superior fire protection compared to standard cables and can upgrade existing cables to the highest fire technical standard.

**SAVE LIVES / SAVE COSTS / SAVE THE ENVIRONMENT**







## Certified Sustainable Solutions

*FS offer certified sustainable solutions to extend cable life and avoid electrical fire, using nothing but non-toxic materials.*



Our commitment to the environment is documented through our DNV ISO 14001 environmental management systems certification.

mitigates the negative end-of-life environmental impact of cables, as well as the inherent environmental and resource cost of excessive production and installation of new cables.

### Repaired cables are fully restored and functioning

FS procedures are tested and approved. We deliver a turnkey solution that avoids operation shutdown, removes the costly need for cable replacements, and halts the spread of further damages. Rejuvenated cables continue their operation with a warranty backed application.

Fire Security products and systems are LEED compliant, non-toxic, solvent-free, phosphate-free, and do not contain asbestos or any other substance identified as being carcinogenic. Our products release no poisonous and corrosive gases and smoke.

### Significant reduction of excessive production and waste

By extending the life of cables, FS limits the need for resource-intensive cable replacement. Cables contain large volumes of plastic, PVC, XLPE in sheets and insulation. Those components are commonly incinerated openly or disposed of in landfills. Extending cable lifetimes

### Prevention of toxic and poisonous gasses

Our coatings prevent flame propagation and prevent escalation from a small fire to a major incident. FS cable fire protection minimizes impact from short circuits, removes cables as a source of combustion and prevents the release of toxic & poisonous gasses.



#### GREENHOUSE GAS EQUIVALENCIES CALCULATIONS

The Global Warming Potential (GWP 100) of production of 1000 meters of Single Core 630 mm<sup>2</sup> Voltage Grade 64/110KV cable is 32863 kgCO<sub>2</sub>eq. Extending the operating life of such cables and avoiding replacement has significant positive impacts.



**1 meter = 82 miles**  
Keeping just 1 meter of cable in service is the equivalent of removing the GHG emissions of an average family car being driven for 82 miles.



**10 meters = 39,975 charges**  
Keeping just 10 meters of cable in service is the equivalent of removing the CO<sub>2</sub> emissions 39,975 smartphones being charged.



**100 meters = 1.1 tonnes**  
Keeping just 100 meters of cable in service is the equivalent of avoiding the GHG emissions of 1.1 tonnes of unrecycled waste in a landfill.



**1000 meters = 76 barrels**  
Keeping just 1000 meters of cable in service is the equivalent of removing the CO<sub>2</sub> emissions from the consumption of 76 barrels of oil.





## Certified Sustainable Cable Maintenance

FS offer certified sustainable solutions to extend cable life and avoid electrical fire, using non-toxic materials.

*Save Lives / Save Costs / Save The Environment*

Our products have been approved by leading classification societies and authorities including U.S. COAST GUARD, IMO MED D & IMO MED B, Lloyd's Register, Achilles, Bureau Veritas, DNV, RINA, NMA, ABS, FM and UL



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