



**FIRESAFE GOLD**  
FIRE RESISTANT CABLES



*Golden Solutions For The Best Quality*





# **FIRESAFE**

Increasing population in the world, developing technologies and industrialization sourced general public use trade centers, high buildings, hotels, schools, hospitals, subways bring the risk of fire and pecuniary & non-pecuniary costs along with.

The first way of preventing and minimizing the loss of life and property costs, passes by eliminating or reducing facts that can cause fires. It shouldn't be forgotten that the golden rule of fire protection is preventing fire eruption rather than extinguishing it.

The reaction and resistance to fire characteristics of the materials which are used in cables in construction products and the one that is basic of electrical systems, came into prominence. Cables should keep operating at possible fire moment, providing continuity and minimizing the emission of harmful, poisonous gases which negatively affect human health as much as possible, producing the reaction and resistance to fire class with high-grade materials which become even more important for the safety of life and property. For this reason choosing the right cable is essential.

Firesafe Gold cable has been designed as user-friendly and high-performance cables which is fire resistant, halogen-free, flame retardant, low smoke and certified by LPCB.

We are using the latest technology, materials and equipments to meet requirements of standards.

## **Firesafe Gold cables are used as a power and control cables:**

- Machine and equipment that are required to continue its function during a fire (emergency elevators, fire water pumps e.g.),
- Ventilation systems which are connected to fire alarm system,
- In emergency lighting at fire escape exits,
- Emergency power supplies,
- In places where human life and valuable materials and equipment need to be protected.

## **Typical applications are:**

**BS 5839-1** : Fire detection and fire alarm systems for buildings - Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises

**BS 5839-8** : Fire detection and fire alarm systems for buildings - Code of practice for the design, installation, commissioning and maintenance of voice alarm systems

**BS 5839-9** : Fire detection and fire alarm systems for buildings - Code of practice for the design, installation, commissioning and maintenance of emergency voice communication systems

**BS 5266-1** : Emergency lighting. Code of practice for the emergency lighting of premises

**BS 8519** : Selection and installation of fire-resistant power and control cable systems for life safety and fire-fighting applications.

Firesafe Gold cables should be installed in accordance with last edition of BS7671 or any other appropriate national regulations. It is suitable for indoor and outdoor installation in suitably protected environments and particularly appropriate for surface wiring, direct burial in plaster, tray.

**Applicable Standards:**

Firesafe Gold cables are designed according to BS 7629-1:2015 and is completely LPCB approved.

Approval to BS 7629-1 includes approval to BS 6387 Cat. CWZ, EN 60754-1 (EN 50267-2-1), EN 61034-2, EN 50200 Class PH30 & PH60 & PH120 & Annex E, EN/IEC 60332-3 Part 22 Cat A and BS 5839-1 Clause 26.2d for these cables.

Designated by category according to their special fire resistance characteristics Category STANDARD 30 and Category STANDARD 60.

The BS 7629-1 standard does not cover cables with a voltage rating that exceeds 300/500V.

**FIRE RESISTANT**

**BS 6387 Cat. CWZ:**

**Cat. C:**

Cat. C subjects the cable under test to a flame via direct impingement corresponding to a temperature attack of 950 °C ±40 °C.



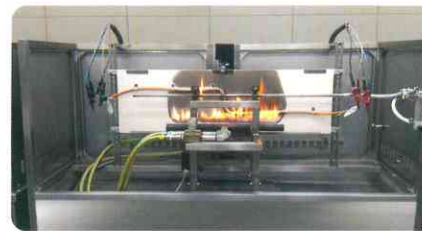
**Cat. W:**

Cat. W subjects the cable under test to a flame via direct impingement corresponding to a temperature attack of 650 °C ±40 °C with direct application of water simulating a sprinkler system.



**Cat. Z:**

Cat. Z subjects the cable under test to a flame via direct impingement corresponding to a temperature attack of 950 °C ±40 °C with indirect application of mechanical shock.



**BS EN 50200 (Class pH30 - pH60 - pH120):**

A single piece of cable is attached to a special fibre glass wall with cable at the minimum bending radius. It is burned with the min. test temperature 830°C propane burner. The rated tension values of the cable are applied on the conductors during the test. Every five minutes a mechanical shock of 25 kg is applied to the wall the cable is attached to. The tension values must be preserved during the test.

**BS EN 50200 + Annex E:**

In addition to the test conditions EN 50200-PH30, after 15 min and with the flame and shock still being applied, the water spray shall be started. The application of water shall continue until the end-point of the test.



Flame temperature	Test conditions	Time							
		10'	15'	20'	30'	40'	50'	60'	
950 °C		<b>BS 6387:2013 Cat. C</b>							
650 °C		<b>BS 6387:2013 Cat. W</b>			30 min.				
			15 min.		15 min.				
950 °C		<b>BS 6387:2013 Cat. Z</b>		15 min. (1 impact / 30 sec.)					
830 °C		<b>BS EN 50200:2006</b>			<b>PH 30</b>				
830 °C		<b>BS EN 50200:2006 + Annex E</b>			30 min.		30 min. (1 impact / 5 min.)		



# FIRESAFE GOLD



FLAME RETARDANT CHARACTERISTIC / LOW SMOKE EMISSION / WITHOUT POISONED AND CORROSIVE GASSES CIRCUIT INTEGRITY 180 MINUTES (min) / CIRCUIT INTEGRITY WITH SHOCK PH 120/ANNEX E PH 30 / CWZ



## Conductors

Plain annealed copper wire, solid class 1 or stranded\* class 2 according to EN 60228 (for 4 mm<sup>2</sup> is available both solid and stranded, for others are available only solid)

## Insulation

Special, fire resistant silicone rubber type EI2 to BS EN 50363-1

<b>2 CORES</b>	<i>Blue</i>	<i>Brown</i>		
<b>3 CORES</b>	<i>Brown</i>	<i>Black</i>	<i>Grey</i>	
<b>4 CORES</b>	<i>Blue</i>	<i>Brown</i>	<i>Black</i>	<i>Grey</i>

## Cabling

Insulated cores are stranded together

## Overall screen

Copolymer laminated aluminium tape with the metallic element in contact with the uninsulated circuit protective conductor

Uninsulated tinned copper protective conductor of the same section and class as the insulated conductors

## Outer sheath

LSZH thermoplastic material type LTS3 to BS 7655-6.1

## Colour of sheath

Red, White, Orange, Black