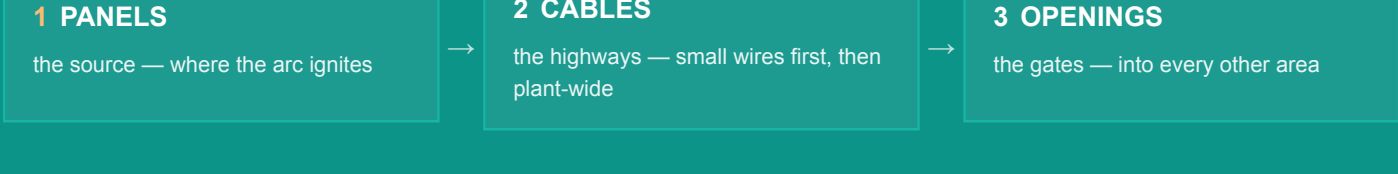


Electrical Passive Fire Protection

The **PCO System** — **Panels · Cables · Openings**: the world’s only complete electrical fire defence. Fires begin in panels, travel on the cables, and enter every other area through the openings — **every link defended**.



A FEW HOURS OF FIRE — MONTHS OF BUSINESS DISRUPTION

Active systems can extinguish a fire within hours — **if** passive fire protection has bought them the time by controlling the spread. Replacing fire-damaged panels and cables, however, means **months of business interruption** — stopped market supplies, lost market share, irrecoverable losses.

- ★ Business disruption costs

★ Property damage costs

★ Loss of inventories and data

★ Panel and cable replacement costs
- ★ Human injury — legal liabilities

★ Higher insurance costs

★ Regulatory fines — loss of reputation

THE PCO CHAIN — PANELS · CABLES · OPENINGS. ALL THREE MUST BE FIRE-PROTECTED.

1

PANELS

THE SOURCE

Fires begin here — an arc or short circuit inside the panel. Seal the gaps, deny the oxygen, stop the panel feeding its own fire.



Cable entries and panel gaps sealed against fire and pests.



An unprotected panel ablaze — the fire DC 52 prevents.

FIREX FBS 73 — Fire Sealant (Putty Stick)
India's first oxygen-limiting panel sealant — limits oxygen entry so **sparks and short circuits never become large fires**. A flexible intumescent putty stick for gaps, cavities and cable entries — made for shop-floor panels surrounded by people and combustible material.

Up to **2 hours' protection** (IS 12458 · BS 476-Part 20). Seals fire and smoke in — and dust, moisture, insects and rodents, the flashover causes, out. Easy to install; easy cable retrofitting.

FIREX DC 52 — Intumescent Fire-Suppression Paint
India's first fire-barrier panel coating — stops the panel's own paint feeding the fire and lays a thermal barrier that **saves the internal components**.

Maximum time to control the fire, prevent smoke-caused deaths and evacuate — no production stoppage, no failed emergency services, no catastrophic accident.

2

CABLES

THE HIGHWAYS

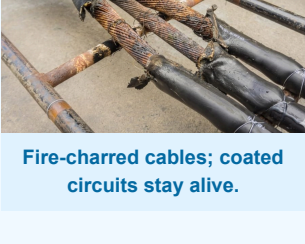
Small-diameter cables ignite first; the cable highways then carry the fire plant-wide — and the same cables power your pumps, alarms and exits.



Small-diameter cables alight; EC 7034 denies the fuel.



Cable highways whose sheathing won't carry fire.



Fire-charred cables; coated circuits stay alive.

FIREX EC 7034 — Fire-Suppression Coating · Small-Diameter Cables & Panel Internal Wiring
The fire-suppression coating for the thinnest, first-to-ignite cables — **CBRI-certified 120 minutes**; IEC 60332-3-22 **Category A** vertical flame propagation on bunched cables.

Translucent — wiring colour codes stay visible; **flexible** — cables stay workable. For small-diameter power, networking and instrumentation cables and panel internal wiring — it saves the heart of the electrical supply.

FIREX EC 43 General — Longest-Duration Propagation Prevention
The world's longest flame-propagation protection — IEC 60332-3 for **240 minutes** at just 1.6 mm DFT, CBRI-certified, low smoke. The sheathing cannot feed a fire — **no fuel, no fire, no losses**; a local fault never goes plant-wide.

FIREX EC 43 Survival — Longest-Duration Circuit Survival
The world's only cable coating with true fire survivability — IEC 60331-21: **240 minutes at 750 °C + 15 minutes cooling**; IS 17505-1: **180 minutes at 950 °C** (higher temperature simulating long-duration fire). 360° protection at 1.6 mm — no cable derating.

Pump controls, alarms, ventilation and exit lighting keep working through the fire. Post-fire: recoat damaged sheathing with 1465 Flexiguard and apply fresh EC 43 — no immediate cable change.

WHAT A CABLE ACTUALLY HOLDS — XLPE 4-CORE 70 SQMM, TESTED

XLPE — uncoated
standard cable

6 min · circuit dead

XLPE FR-LS — uncoated
flame-retardant low-smoke

7 min · circuit dead

+ EC 43 Survival · 1.6 mm
IEC 60331-21 · CBRI

240 min · circuit alive

0

60

120

180

240 min

WHY EC 43 FIRE SURVIVAL GRADE?	FIREX EC 43 SURVIVAL · 1.6 MM	OTHER CABLE COATINGS
In a fire, does the circuit keep working?	Yes . Passes IEC 60331-21 (CBRI) 240 min at 750 °C + 15 min cooling, and IS 17505-1 (CBRI) 180 min at 950 °C.	No . Most fail even the 90-minute IEC 60331 minimum — circuits fail.
Do production, safety and emergency services keep running?	They keep running.	They stop.
Post-fire, must the cables be changed immediately?	No . Recoat damaged sheathing with 1465 Flexiguard + fresh EC 43.	Yes — immediate replacement.

3

OPENINGS

THE GATES

Every wall and floor penetration is a gate the fire walks through. **NBC 2016 Part IV** makes **sealing them law** — every service penetration through fire-rated construction, sealed to the rating of that element.



A wall opening fire-stopped with castable mortar.



The mineral-wool barrier — fire on one side, safety on the other.

FIREX FM 71 — Firestop Mortar · 75 mm · 2 hours
For load-bearing floor and wall openings — **the workhorse seal: strong, tested, economical**. Inorganic pourable/castable CBRI-developed mortar, among the most advanced in the world; **2 hours at only 75 mm** (IS 12458 · ASTM E 814 · UL 1479). Lightweight — **easier retrofitting, faster installation, major cost savings**.

FIREX FB 250 — Barrier System · 100 mm · 2 hours
For occupied buildings, data halls and retrofit — **fast, clean, dry: no wet work near live equipment**. The pure mineral-wool ablative barrier — 2-hour rated, fully re-enterrable for future cable changes.



Mortar + mineral wool — the two systems in one barrier.

FIREX FM 71 + FB 250 — Hybrid Composite · 100 mm · 2 hours
India's first hybrid firestop barrier — the two systems above combined: mineral wool's clean speed + mortar's load-bearing strength, universal for wall and floor, sealing cum load-bearing. **Re-enter for new cables without breaking the rating**. Tested at CSIR-CBRI Roorkee; extend to **4 hours** with FIREX EC 43.

THE OPENING ON YOUR DRAWING	THE SYSTEM	SEAL · RATING
Load-bearing floor & wall openings	FM-71 firestop mortar	75 mm · 2 hours
Cable routes opened again and again	FM-71 + FB-250 composite	100 mm · 2 hours
Occupied buildings · data halls · retrofit	FB-250 barrier system	100 mm · 2 hours
The cables passing through the seal	FIREX EC 43 one-foot coat — included at no extra cost : fire cannot travel the cables through your seal	IEC 60332

Both paths closed. Fire crosses a penetration by two routes — through the opening, and along the cable. An imported mortar closes only the first. **Stanvac closes both** — 2 hours at the wall, and zero flame spread along the cable. No barrier-only brand closes the second.

CERTIFIED & TESTED: CSIR-CBRI Roorkee · IEC 60331-21 · IEC 60332-3 · IEC 60332-3-22 Cat A · IS 17505-1 · IS 12458 · ASTM E 814 · UL 1479 · BS 476-Part 20 · FM 3971

About Stanvac. Stanvac Chemicals, established 1994 — a leading manufacturer and solution provider of certified Passive Fire Protection, preventing production shutdowns across industries, institutions, commercial complexes, data centres, railways, metros, airports and high-rise buildings.

PROTECT ALL THREE — PANELS · CABLES · OPENINGS **Stanvac · Passive Fire Protection**
One survey · one specification · one accountable partner. **sales@stanvac.com · +91-8527199811**