Stanvac®

"Best in World"

STANVAC · PASSIVE FIRE PROTECTION DIVISION

WHY AN ORDINARY CABLE COATING IS NOT ENOUGH

By FM Approvals' own listing, an FM 3971 cable coating only lowers the chance of ignition from **arcs or sparks** — and was **not tested for a severe, sustained fire**. It holds a flame for minutes, then becomes fuel. It will not keep your circuits — or your people— alive.

~40 min	240 min	240 min
ORDINARY · IEC 60332 MINIMUM → THEN FUEL	EC 43 GENERAL · MAX FLAME PROPAGATION	EC 43 SURVIVAL · MAX CIRCUIT SURVIVAL

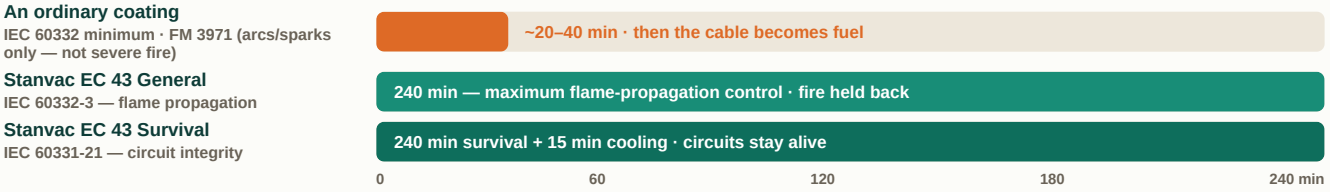
In a fire, the cabling that spreads the flame is the same cabling that powers your pump controls, alarms and exit lighting. An ordinary coating delays surface flame for about **20–40 minutes** (the standard's minimum), then the cable itself burns and the circuit dies — exactly when you need it most. The real question is not "does it pass IEC 60332, or carry FM approval?" — it is "**how long does the circuit stay alive?**"

FM APPROVALS' OWN PUBLISHED LISTING · EVERY FM 3971 CABLE COATING

FM 3971 approval covers one thing only: lowering the chance that cables ignite from a brief source — arcs or sparks falling into the tray. On a real fire, FM is explicit — these coatings were **"not tested to maintain cable protection under severe and extended fire exposure conditions."**

Source: FM Approvals Approval Guide — Fire Protective Coatings for Grouped Electrical Cables, Class 3971.

WHAT EACH ACTUALLY HOLDS IN A FIRE — MINUTES VS HOURS



A **The IEC 60332 minimum does not control a fire — or buy time to evacuate.** A coating that only meets the minimum delays surface flame for about 40 minutes, then feeds it. EC 43 General is the maximum: **240 minutes** of flame-propagation containment (IEC 60332-3) — six times that minimum — long enough to **hold the fire back and clear your people**. Proven at India's leading laboratory at **1.6 mm DFT**, with no cable derating.

B **Only survival rating keeps the circuit alive — EC 43 Survival.** **IEC 60331-21: 240 minutes + 15 minutes cooling** (in-house, no failure even at 6 hours). Pump controls, alarms, ventilation and exit lighting keep working through the fire. No cable coating in the world passes even the 180-minute IEC 60331 ceiling; EC 43 Survival reaches 240.

C **One coating is not fire safety — small-dia cables ignite first.** A coating on large cables alone leaves the rest of the path open:

Panels — the source	**FBS 73** gap-seal + **DC 52** thermal-barrier overcoat
Small-dia cables — ignite first	**FIREX EC 7034** — translucent & flexible · CBRI 120 min, IEC 60332-3-22 Cat A
Large-dia & critical circuits	**EC 43 Survival** — IEC 60331-21
Openings — the gates	**FM 71 + FB 250** hybrid firestop (2 hr)

D. If it is missing and someone dies, the liability is personal and criminal.

80% of India's urban fires are electrical; **7,435 fire deaths in 2022 (NCRB)**. Under the OSH Code 2020, BNS 2023 and Consumer Protection Act 2019, a fire death is a personal criminal offence — in factories the **director-occupier and manager**, in public premises the **owner, proprietor and licensee**, can be prosecuted personally, not merely the company. In the Uphaar and AMRI tragedies, owners and directors faced personal criminal trial.

Statistics: NCRB 2022. Legal & insurance positions are summarised — please verify with your counsel and insurer.

E **Why every passive layer should come from one source — Stanvac.** One accountable supplier for panels, cables, circuits and openings — Cable Survival™ · Panel Fire Immunity™ · Firestop Barrier™ — survival-rated, not merely flame-retardant; proven at India's leading lab and specified by Reliance, Adani, Tata Steel, Jindal, SAIL and UltraTech.

The evidence behind every point — test reports available on request

- **The Truth About Cable Fire Protection Coatings — 2026**
- **EC 43 General — IEC 60332-3 report** (240 min)
- **PFP data sheets** — EC 43, FBS 73, DC 52, FM 71 + FB 250
- **EC 43 Survival — IEC 60331-21 report** (240 min + cooling)
- **FIREX EC 7034 — CBRI report** (120 min) + TDS
- **Legal Consequences of Fire-Caused Death or Injury**

Do not protect for minutes what must survive for hours. We would value 15 minutes to take your team through the reports and survey your site.

Stanvac · Passive Fire Protection
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