

WHY AN ORDINARY CABLE COATING IS NOT ENOUGH

FM Approvals' own listing: an FM 3971 coating only lowers the chance of ignition from arcs or sparks — never tested for a severe, sustained fire. Minutes of hold, then fuel. **It will not keep your circuits — or your people — alive.**

~40 min

ORDINARY · IEC 60332 MINIMUM
→ THEN FUEL

240 min

EC 43 GENERAL · MAX FLAME
PROPAGATION

240 min

EC 43 SURVIVAL · MAX CIRCUIT
SURVIVAL

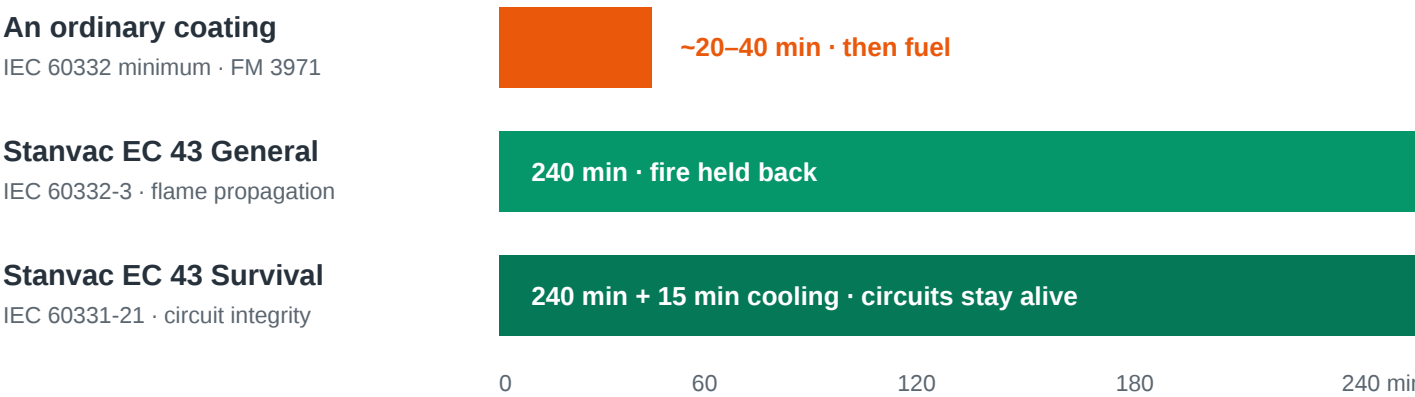
The real question is not “does it pass IEC 60332?” — it is “*how long does the circuit stay alive?*”

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

FM 3971 covers one thing: reducing the chance that arcs or sparks ignite the tray. For 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 minimum does not buy evacuation time.

IEC 60332 minimum = ~40 minutes, then the coating feeds the fire. **EC 43 General holds propagation for 240 minutes** (IEC 60332-3) — six times the minimum — at 1.6 mm DFT, no cable derating.

B

Only a survival rating keeps the circuit alive.

EC 43 Survival: IEC 60331-21, 240 min + 15 min cooling (in-house: no failure even at 6 hours). Pumps, alarms, ventilation and exit lighting keep working through the fire. **No other cable coating in the world passes even the 180-minute IEC 60331 ceiling.**

C

One coating is not fire safety — small-diameter cables ignite first.

Coating 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, anti-rodent · CBRI 120 min, IEC 60332-3-22 Cat A · RDSO SAFE
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 · CPA 2019, a fire death is a **personal criminal offence** — the **director-occupier and manager** in factories, the **owner, proprietor and licensee** in public premises. In the Uphaar and AMRI tragedies, owners and directors faced personal criminal trial.

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

E

Every layer from one source — Stanvac.

One accountable supplier for panels, cables, circuits and openings — Cable Survival™ · Panel Fire Immunity™ · Firestop Barrier™. Survival-rated, proven at India’s leading lab, specified by **Reliance, Adani, Tata Steel, Jindal, SAIL and UltraTech.**

The evidence — every report 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 120 min + NABL rodent + TDS

› Legal Consequences of Fire-Caused Death or Injury

Do not protect for **minutes** what must survive for **hours**.
Give us 15 minutes with your team — the reports and a site survey.

Stanvac · Passive Fire Protection
sales@stanvac.com · +91-8527199811