GOVERNMENT OF INDIA

MINISTRY OF HOUSING & URBAN AFFAIRS

CENTRAL PUBLIC WORKS DEPARTMENT

CPWD ELECTRICAL SPECIFICATIONS 2023

Part I — Internal | Fire barriers, sealing + essential electrical circuits

For projects adopting CPWD specifications · confirm applicable local building requirements



CPWD BUILDINGS. SAFE ESCAPE.

SEAL OPENINGS. PROTECT CRITICAL CABLES.

Government guidance.
Stanvac technology. Your gain.

6 APPLICATIONS / WALLS · FLOORS · FIRE PUMPS · SMOKE CONTROL · ALARMS

01 CABLE OPENINGS THROUGH WALLS



A fire-rated wall is weakened by an open cable gap.

CPWD 2023 · ANNEX A-6.4(d)

The electrical inspection provisions include fire barriers and sealing to restrict fire spread.

STANVAC SOLUTION

FM 71 + FB250 HYBRID COMBO

Mortar strength + mineral-wool boards: **load-bearing safety + easier cable retrofitting**, with the specified supports and tested assembly.

YOUR GAIN

Contain fire and smoke at the opening. Ease cable retrofits.

Select the tested assembly for the wall, cables and required rating. Confirm the local fire-authority and project requirements.

02 FLOOR + SHAFT CROSSINGS



An open shaft can carry fire from floor to floor.

CPWD 2023 · ANNEX A-6.4(d)

Apply the specified fire barriers and seals at required fire-compartment crossings.

STANVAC SOLUTION

FM 71 + FB250 HYBRID COMBO

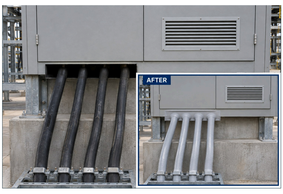
A matching **2-hour tested hybrid** brings mortar strength together with mineral-wool boards for easier future cable additions.

YOUR GAIN

Protect floor separation. Make future re-entry manageable.

The floor rating, permitted services and supports govern the seal detail. Restore the tested arrangement after cable changes.

03 FIRE-PUMP + PRESSURISATION FEEDS



A pump or pressurisation fan needs a surviving power feed.

CPWD 2023 · 3.1.7 · TABLE (i), (ii)

Specifies **950°C / 180-minute FS cables** with the stated fire, water and shock duty for these services.

STANVAC SOLUTION

EC 43 SURVIVAL

Submit a matching complete-system proposal. Stanvac reports **180 min at 950°C** to IS 17505-1 for its tested cable system.

YOUR GAIN

Help essential fire-response equipment keep working.

Coating is not an automatic substitute for specified FS cables. Demonstrate every required fire, water and shock test condition.

04 SMOKE-VENTING CONTROL CIRCUITS



Failed control cables can prevent smoke extraction.

CPWD 2023 · 3.1.7 · TABLE (iii)

Smoke-venting circuits, including damper and actuator services, are specified for **950°C / 60 minutes**.

STANVAC SOLUTION

EC 43 SURVIVAL

Assess compatible cables for continuous route protection. Submit the tested cable type, coating build and circuit-performance evidence.

YOUR GAIN

Help smoke-control systems remain available for evacuation.

Obtain design approval for the full circuit. Protect connections and supports; preserve cable capacity, movement and equipment ventilation.

05 EXIT SIGNS + EMERGENCY LIGHTING



Dark escape routes make evacuation harder.

CPWD 2023 · 3.1.7 · TABLE (vi), (vii)

Specifies **950°C / 120 minutes** for exit-sign and emergency-lighting cable duties.

STANVAC SOLUTION

EC 43 SURVIVAL

Propose full-route protection on an accepted cable system. Match the specified temperature, duration and installation conditions.

YOUR GAIN

Help keep escape routes illuminated during fire.

Emergency power, circuit segregation and required FS cable specification remain essential. Replace defective cables before treatment.

06 FIRE-ALARM CABLE ROUTES



A broken alarm circuit can delay evacuation.

CPWD 2023 · 3.1.7 · TABLE (viii)

Specifies **650°C / 60 minutes** for conventional and intelligent-addressable fire-alarm cable duties.

STANVAC SOLUTION

EC 43 SURVIVAL

Additional cable-route protection, subject to the alarm designer's approval and matching system evidence.

YOUR GAIN

Support reliable alarm signalling when it matters.

Do not coat sensing cable, detectors or sampling holes. Retain the prescribed alarm system, cable specification and standby power.

THE TEST MUST MATCH THE PROTECTION YOU NEED.

2 HOURS

FM 71 + FB250 HYBRID COMBO

Penetration firestop
IS 12458
Match the tested assembly

180 MIN

EC 43 SURVIVAL

Circuit survival at 950°C
IS 17505-1
Match all required test conditions

240 MIN

EC 43 SURVIVAL

Circuit survival at 750°C
IEC 60331-21
4-core × 70 mm² XLPE / 1.6 mm

Performance figures are reported by Stanvac for specific tested systems. Obtain the matching test report and installation detail. Flame-spread resistance, circuit survival and penetration fire resistance are different performances.

START WITH YOUR MOST VULNERABLE AREA.

Send cable-route, panel and opening photos.

Ask Stanvac for a site survey, system specification and offer.

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GOVERNMENT SOURCE CPWD General Specifications for Electrical Works, Part I — Internal, 2023: Annex A-6.4(d) and §3.1.7. Technical guidance for projects adopting these specifications; not a universal statutory mandate.

PRODUCT DETAILS EC 43 / EC 7034 · FM 71 + FB250 HYBRID COMBO · 931B STRIPPEX

Confirm applicable building standards, local bye-laws, fire-authority conditions and the contract specification. A coating proposal does not automatically replace specified FS cables. Match required fire, water and mechanical-shock conditions.

Selected sales applications, not a complete fire-safety checklist. Stanvac proposals do not imply government endorsement or whole-facility compliance. AI sector and application illustrations; "after" shows treatment, not a verified installation or fire-test result. Repair or replace defective cables before coating.