

TECHNICAL NOTE

Dielectric Flooring — “IS 15652:2006”

Ordinary epoxy floor coatings vs STANGARD 1311 INSULKOTE · For specifiers, consultants and plant electrical teams · July 2026

WHAT “IS 15652:2006” REQUIRES

- The Indian Standard for insulating floors at electrical panels. Replaced “IS 5424” (Gazette S.O. 2086, 17-07-2007).
- Six tests: breakdown voltage (BDV), AC proof voltage, leakage current, insulation resistance, acid/alkali resistance, surface flame spread.
- All six must pass — third-party certified.
- LT panels (415 V): Class A — BDV 30 kV min, proof 10 kV. HT panels (11 kV): Class B — BDV 45 kV min, proof 22 kV. Class C (33 kV) — BDV 65 kV min, proof 36 kV.
- Yet panel-room floors are routinely finished in ordinary epoxy floor coatings — **described as “dielectric”, certified to nothing.**

ORDINARY EPOXY FLOOR COATING VS STANGARD 1311

Parameter	Ordinary Epoxy Floor Coating	STANGARD 1311 INSULKOTE
“IS 15652:2006”	Not certified — cannot pass the six tests	Passes all six — CPRI · Spectro · Eurofins; ERDA-tested
What it protects	The concrete — dust, wear, looks	The person — certified shock protection
BDV in air	No system BDV certificate	>30 kV (Class A, ERDA); Class B >45 kV
Proof · leakage · IR	Not tested	>10 / >22 kV; <10 µA; >10 lakh MΩ
Legal standing	Paint, not protection — audit non-conformance	India’s only legal dielectric flooring
Service life	Repaint cycles; wears where operators stand	Minimum 10 years proven; nano-ceramic hardness

WHY COMPLIANCE MATTERS

- CEA Safety Regulations (Reg. 19) mandate “IS 15652:2006” insulation at electrical apparatus. Every electrical safety audit checks it.
- “IS 15652” certification is the only proof the floor protects a person at rated voltage.
- **An electrocution death is a personal criminal offence for the owner, director and manager — and uninsurable (BNS 2023 · OSH Code 2020).**

THE COMPLIANT SYSTEM — STANGARD 1311 INSULKOTE

- Self-levelling, 100% solvent-free “Flyash–Glassflake” epoxy dielectric floor system, nano-filler fortified — technology licensed from IIT Bombay.
- **Available in Class A, B & C — certified floors for panels up to 33 kV.**
- Replaces rubber mats: mats shift, curl, age and get removed — here the floor itself is the certified insulation. Clean, dust-free panel rooms for years.
- From the Stanvac electrical range — 34 solutions, one standard: every claim carries a test report, every product a warranty. Since 1994; trusted across 41 industries by Reliance, Tata Steel, SAIL, UltraTech and thousands more.
- Annual calibrated Elcometer report; delivered turnkey — one vendor, one warranty.

IF AN ORDINARY COATING GOES DOWN

- What the plant gets: floor paint billed as “dielectric”, with a lab kV/mm figure in place of the system certificates “IS 15652” demands.
- No real insulation under the operator, acceptance that can never be verified, audit non-conformance — and full recoating later at double cost.
- **The exposure is human — people at HT boards standing on an uncertified floor.**

SPECIFY IT RIGHT — THE “IS 15652:2006” SYSTEM

CLASS B — HT PANELS, UP TO 11 KV	
756 Stangard Floor Primer	80–100 microns (1 coat)
Stangard 1311 Insulkote — Class B	1800–2000 microns
Stangard 1311 Insulkote Top Coat	100–120 microns (1 coat)

CLASS A — LT PANELS, 415 V	
756 Stangard Floor Primer	80–100 microns (1 coat)
Stangard 1311 Insulkote — Class A	1100–1200 microns (4 coats)
Stangard 1311 Insulkote Top Coat	100–120 microns (1 coat)

If the specification does not cite “IS 15652:2006”, it is paint — not protection.

- **BDV in air: >45 kV (Class B) / >30 kV (Class A). AC proof: >22 kV / >10 kV.**
- Leakage current <10 µA; insulation resistance >10 lakh MΩ at 500 V (third-party reports).
- All six “IS 15652:2006” tests third-party certified (CPRI / Spectro / Eurofins); BDV testing approved by ERDA and/or CPRI.