

Paper cable impregnating process

The words “draining” and “drained” are used to describe the compound and process of PILC cables respectively. This bulletin serves to offer clarification.

All our Paper Insulated cables are impregnated with MIND (Mass Impregnated Non-Draining) compound. After the impregnating process the excess compound is pumped off either cold (80°C) or hot (120°C).

Cold drained (80°C)

This is the normal process and is referred to in SANS 97 as “Fully impregnated”.

Hot drained (120°C)

This process is referred to in SANS 97 as “Drained”. Compound that could result in hydrostatic pressure from a cable installed in a shaft is removed. Such cables have enhanced paper insulation thickness. Such hot drained, enhanced thickness, cables are termed General Purpose (Drained) in SANS 97.

Where cables with this enhanced insulation thickness are cold drained they are referred to by SANS 97 as Heavy Duty (fully impregnated) cables.

Designs which cater for such alternatives are listed below.

SANS 97 Table	kV	System Earthing	Description
22	3.3/3.3	Unearthed	Heavy Duty (fully impregnated) or General Purpose (drained) belted three core
23	3.8/6.6	Earthed	Heavy Duty (fully impregnated) or General Purpose (drained) belted three core
24	6.6/6.6	Unearthed	Heavy Duty (fully impregnated) or General Purpose (drained) belted three core
25	6.35/11	Earthed	Heavy Duty (fully impregnated) or General Purpose (drained) belted three core
26	11/11	Unearthed	Heavy Duty (fully impregnated) or General Purpose (drained) belted three core
27	6.35/11	Earthed	Heavy Duty (fully impregnated) or General Purpose (drained) screened three core

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