



Safehouse

The power to protect

Guide to
Electrical Installations



Introduction

A good way to determine the requirements for a safe and effective electrical installation, is to look at the Certificate of Compliance.

The CoC was introduced in South Africa in 1993, coinciding with the national registration of electrical contractors, which replaced annual registration at individual municipalities. In the same timeframe, municipal electrical bylaws were replaced with SANS 10142, the national code of practice for the wiring of premises (the 'wiring code').

The current legal framework, an act of Parliament that encompasses the CoC, is as follows:

- **Act No. 85 of 1993: Occupational Health and Safety Act (as amended)** Including regulations incorporated under section 44:
 - **Regulation No. R. 242 – 6 March 2009: Electrical Installation Regulations Which enacts several registrations** and, under Annexure 1,
 - **The Certificate of Compliance (CoC)**
- **Regulation No. R. 242 also incorporates the following safety standard:**
 - **SANS 10142-1: The wiring of premises Part 1: Low voltage installations**
Which includes under section 8.8:
 - **The test report for all electrical installations**

The general purpose of the electrical regulatory framework is the allocation of responsibility under section 2 of R. 242:

'... the user or lessor of an electrical installation, as the case may be, shall be responsible for the safety, safe use and maintenance of the electrical installation he or she uses or leases.'

To this end, the CoC and its test report are almost like a 'birth certificate', detailing the creation of a particular electrical installation on a particular and unique physical premises, and demonstrating compliance with certain safety features required in terms of the wiring code, SANS 10142. Several entities are allowed to issue blank CoC forms to contractors and registered persons; these are: The Department of Employment and Labour (DOEL), the Electrical Contractors' Association (ECA), the Electrical Conformance Board (ECB) and several electrical wholesalers.



Electrical Installations - Overview

Abbreviations Used:

ECA: Electrical Contractors' Association

SANS: South African National Standard

CI: Chief Inspector

ECB: Electrical Conformance Board

DOEL: Department of Employment and Labour

SANAS: South African National Accreditation System

	Legal Entities	Registration By	Issuing / Responsible Entities	Function
Occupational Health & Safety Act	Department Of Employment and Labour			Legal Framework For Protection Of Human Safety
Electrical Installation Regulations	Department Of Employment and Labour			Legal Framework Governing Electrical Installations
Code Of Practice For The Wiring Of Premises (SANS 10142-1)	Department Of Employment and Labour		SABS Standards Division	Electrical Installation Wiring Rules
Blank & Numbered Certificate Of Compliance Forms			DOEL, ECA, ECB And Some Electrical Wholesalers	Hard Copy Or Electronic Document Detailing Compliance Of Installation With Legal Requirements
Registered Electrical Contractor		Department Of Employment and Labour		Authorised To Carry Out Wiring Work And Signing Of CoCs
The Chief Inspector (CI)	Appointed By The Department Of Employment and Labour			Reacts To Incidents And Complaints Arising Out Of Electrical Installations
Registered Authorised Inspection Authority (AIA)	Reports To The Chief Inspector	Department Of Employment and Labour	Accredited By SANAS	Carries Out Inspections On Behalf Of, And Reporting To, The CI
Municipal Or Utility Inspectors			Municipality Or Eskom	May Inspect Electrical Installation And / Or Require A CoC In Order To Connect Premises To Electricity Supply
Completed Certificate Of Compliance (CoC)		DOEL, ECA, ECB And Some Electrical Wholesalers	Registered Electrical Contractor	Details Of Installation And Test Report Signed By The Registered Contractor. The Document Is Issued To, And Retained By, The Property Owner



Comment on the efficacy of the CoC control system

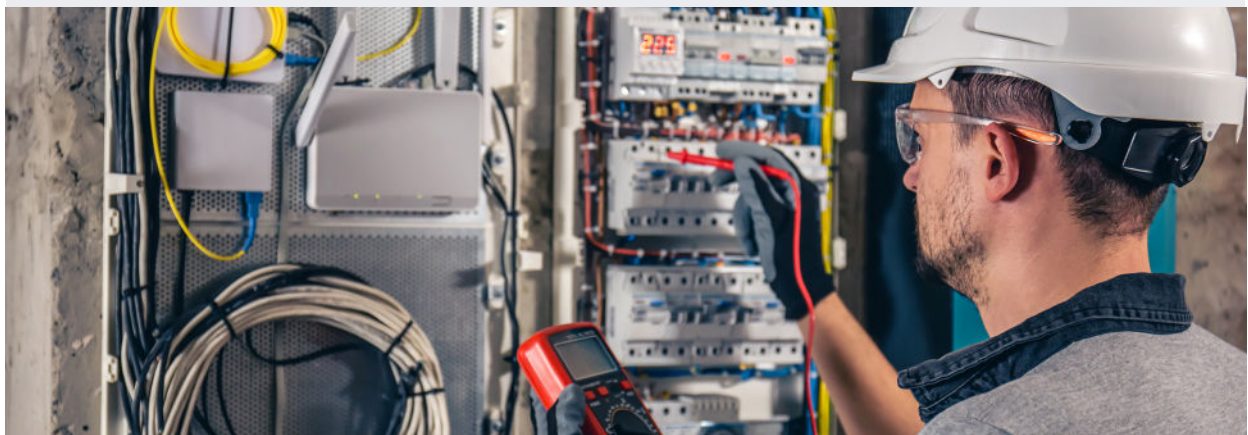
For this system to work, registration of blank CoCs, bona fide contractors and other responsible persons must take place and be maintained on a national database and controlled by the Department of Employment and Labour. For a number of reasons, the system may not always be effective.

Reference to the Electrical Contractors' Association (ECA) is recommended. The ECA is nationally represented and has a list of registered contractors and responsible persons. It also provides some protection to customers of their members.

On a voluntary basis, registrations that have been lodged with the DOEL may have been submitted to the Electrical Conformance Board (ECB) which records these on its data base so an additional resource can be available to users and administrators for the tracking of registrations and CoCs.

A safe electrical installation is vital. What precautions can users take?

- Use contractors that have registered with the DOEL and are in good standing with the ECA.
- Consult a qualified electrical engineer for comfort or if the installation's complexity or size demands it.
- Get references of other work done by contractors you employ. Take the time to consult the references.
- Beware of contract and product prices that are substantially lower than what seem to be the going rates.
- Understand the essence of the CoC. Discuss it with your contractor. Ask questions to justify confidence in the quality of your installation.
- Ensure that a supplementary CoC covers any alteration or addition to an electrical installation.
- Get satisfactory assurance that only electrical products approved for sale by the National Regulator for Compulsory Specifications (NRCS) are used by your contractor.
- Satisfy yourself that a proper inspection and testing of the installation has taken place. Do not rely solely on a signature on the CoC.
- Be wary of a CoC that has been issued too easily.
- Do not be party to a fraudulent CoC in order to save money; that would be grossly irresponsible, illegal and dangerous.
- Do not tamper with your electrical installation. Always use a qualified, registered contractor.
- If in doubt, contact the SAFEhouse Association. It may be able to help you.





About Safehouse

Safehouse is a non-profit organisation that protects South African businesses and people from preventable harm caused by unsafe electrical products and services.

We're a voluntary group of electrical industry stalwarts, technical experts and leaders of our respective businesses and fields. We believe it's our civic and commercial duty to protect our industry and fellow South Africans from suppliers of unsafe electrical products and services.

We work to eradicate dangerous products from the market, to make electrical safety information understandable and accessible and to hold one another, and our industry, to the highest standards of excellence.

Safehouse members have signed a code of conduct that commits them to dealing only in safe electrical products and to responsible behaviour.

If you have doubts about a particular product or service, contact Safehouse for guidance.

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