Electrical CoCs – are you an expert?

By Danie Esterhuizen, ECA(SA)

The Wiring Code, also known as SANS 10142-1, has been the topic of many discussions over the past 99 years of its existence with most of the focus on the Code's requirements for new electrical installations and for additions to existing electrical installation. One of the contentious issues that is often debated is 'what if an existing installation was installed prior to the latest current version of the Wiring Code?'

This is an important question and is often asked by registered persons, users, lessors, estate agents and conveyancing attorneys. People are constantly on the move – economic trends and job opportunities mean that people sometimes have to relocate – and along with all the complexities of moving home, is that the process of selling, leasing or buying new properties requires a valid certificate of compliance. Chances are that your existing property was built before the latest version of the Wiring Code was published and that you will have to rely on the expertise of registered person to issue a valid certificate of compliance. As a registered person, can you say with certainty that you have the knowledge and expertise in your 'toolkit' to declare that an existing installation complies with the general safety principles and that it is safe to use? To find out, let's refer to the requirements in the Electrical Installation Regulations of 2009 as contained in the Occupational Health and Safety Act No 85 of 1993:

Issuing of certificate of compliance

9. *(1) No person other than a registered person may issue a certificate of compliance.*
(2) A registered person may issue a certificate of compliance accompanied by the required test report only after having satisfied himself or herself by means of an inspection and test that -
(a) a new electrical installation complies with the provisions of regulation 5(1) and was carried out under his or her general control; or
(b) an electrical installation which existed prior to the publication of the current edition of the health and safety standard incorporated into these Regulations in terms of regulation 5(1), complies with the general safety principles of such standard; or
(c) an electrical installation referred to in paragraph (b), to which extensions or alterations have been effected, that
(i) the existing part of the electrical installation complies with the general safety principles of such standard and is reasonably safe, and
(ii) the extensions or alterations effected comply with the provisions of regulation 5(1) and were carried out under his or her general control.

The registered person must therefore determine if the electrical installation was erected before the latest version of the wiring code was released; then by means of inspection and testing satisfy himself or herself that the electrical installation complies with the general safety principles of regulation 5(1) and is reasonably safe to use. In simple terms: it is free from any hazard to people, animals and property. Because of the subjective nature of the obligation placed upon the registered person in regulation 9(2) he/she needs to have a tacit understanding of the history of the Wiring Code and be able to holistically grasp the application of the fundamental requirements of regulation 5(1) in a variety of scenarios. The registered person is required to decide whether the certificate of compliance can be issued while being cognisant of the fact that he/she will be held accountable for that decision.

Obviously, this places an enormous responsibility on the registered person and, therefore, it is imperative that he/she executes such work consistently and confidently to ensure that clients (owners, users, lessors, lessees, estate agents and conveyancing attorneys) can be sure that the decision made by the registered person is correct and in line with legislation. If I have just described what you do on a daily basis, then I congratulate you and confidently declare that you fit the definition of an expert! But if reading this, you now realise that you need to brush up on your knowledge on the subject, I have some good news for you: The ECA(SA) has been supporting electrical employers and registered persons for more than 70 years. Contact your local ECA regional office and invest in yourself by attending one or more of the many courses offered by the ECA so that, together with experience, you too can become an expert.

The Red Code: The South African Institute of Electrical Engineers (SAIEE) (1940 – 1952); Blue Code: Standard Regulations for the Wiring of Premises (1952 – 1978); Green Code: South African Bureau of Standards (SABS 0142) (1978 – 2001); and the Grey/Black Code: South African National Standards (SANS 10142-1) (2001 – current).

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Chris Koen, Regional Director Highveld Region, puts the codes into perspective: *"From 1922, electrical contractors in South Africa worked according to the Factories Act, which was their 'Bible' until 1940 when the South African Institute of Electrical Engineers (SAIEE) Red Code of practice came into force. There were a number of reprints and, in 1952, the Blue Code was introduced, which was used by many electrical engineers at the time during the development of cities like Cape town, Johannesburg, Durban and Bloemfontein. Interestingly, the Blue Code was used along with the cities' bylaws, many of which still exist today!*

The Red Code didn't have a 'foreword' or 'scope' but this changed with the introduction of the SABS's Blue wiring code.

The SABS formed a working group to better the requirements of this code and, in 1978, the Green Code was introduced and since then, the content has essentially remained the same, but with amendments updating the content from time to time.

In 2001 the SABS changed the colour of the cover to grey (Grey Code) and two years later to black, and it became known as SANS 10142-1. Currently, SANS 10142-1 is in its third edition.

- *The Red Code: The South African Institute of Electrical Engineers (SAIEE) (1940 – 1952)*
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This history is important because not every old installation is 'unsafe' and the requirements applicable to many old installations can be found in one of these 'historic' publications."