

# Getting electricians right at installation.

ELECTROTECHNOLOGY & ENERGY CASE STUDY

AS/NZS 3000:2018, *Electrical installations*



**T**he technical nature of standards around the world often leads to them working for the professionals in our community more directly than the everyday individual.

A perfect example of standards being professionally driven but interacting with nearly the entire Australian population is the Wiring Rules.

Spanning nearly 600 pages, the Wiring Rules consists of two separate parts. Part One outlines fundamental safety principles that constitute minimum regulatory requirements for safe electrical installation with Part Two detailing solutions to satisfy fundamental safety principles for the electrical installation work.

It is within these hundreds of pages that the complex requirements for the design, construction and verification of electrical installations are outlined. Of which is the selection and installation of electrical equipment forming part of these electrical installations.

## *Safety from start to finish*

Ultimately, the standard seeks to protect persons, livestock, and property from electric shock, fire and physical injury hazards which may arise from an electrical installation used with reasonable care and with appropriate regard to its intended purpose. Also,

**not only does the standard seek to provide guidance on safe use of the installation but also to provide guidance so the installation functions correctly for the purpose intended.**

600 pages, while not too uncommon in the standards world, is a long document when it comes to safety and guidance on effective installation of electrical equipment. However, with over 165,000 Australians employed in the sector it is important standards play their role and provide the best advice as possible on how to operate safely when it comes to electrical wiring.

## *Not just for the technically minded*

Standards such as the Wiring Rules seek to provide technical and specialised advice to those in a particular profession and, in this case, industry. However, as mentioned above,

**the Wiring Rules serve as an example of standards going beyond their technical bounds to help even the most amateur of electricians.**

Whether around their own home, or at the behest of a relative or neighbour, most Australians will at some point have changed a light or taken on exceptionally basic electrical maintenance around the house. It is at this point the Wiring Rules will have played their role.

**While changing a lightbulb may not be the challenging situation the Wiring Rules were developed for, it is this standard that will have shaped how the lights were wired to the house and how they now interact.**

Improving safety in high-risk professions is an obvious and achievable aim of many standards, and the Wiring Rules and recent amendments serve as an example of how this can be done not only to the benefit of the industry but to the entire community.

