AS 5804.4:2025

Australian STANDARD®

STANDARDS Australia

High-voltage live work

Part 4: Barehand work

AS 5804.4:2025

This Australian Standard® was prepared by EL-052, Electrical Energy Networks, Construction and Operation. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on 11 June 2025.

This Standard was published on 27 June 2025.

The following are represented on Committee EL-052:

Communications, Electrical and Plumbing Union — Electrical Division
Department of Primary Industries and Regional Development
Electric Energy Society of Australia
Electrical Regulatory Authorities Council, Australia
Energy Networks Australia
Engineers Australia
National Electrical and Communications Association

This Standard was issued for comment as DR AS 5804.4:2024

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ISBN: 978 1 76175 256 8

Australian Standard®

High-voltage live work

Part 4: Barehand work

Originated as AS 5804.4—2010.
Second edition AS 5804.4:2025.

How to read this Standard

This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's Standardisation Guide 006 for more details about drafting rules.

Australian and Australian/New Zealand Standards are voluntary unless they are referenced in legislation or called up in contracts.

Requirements

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

Recommendations, permissions and possibilities

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

(a) "should" means that something is recommended.

(b) "may" means that something is permitted.

(c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Australian members of the joint Standards Australia/Standards New Zealand Committee EL-052, Electrical Energy Networks, Construction and Operation, to supersede AS 5804.4—2010, *High-voltage live working, Part 4: Barehand work*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to continue to develop this document as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this document is to set out the minimum standards for high-voltage live barehand work to safeguard live workers and the public.

This document forms part of the AS 5804 series on high voltage live working. A list of all parts in this series can be found in the Standards Australia online catalogue.

It is intended that this document be read in conjunction with AS 5804.1.

The major changes in this edition are as follows:

(a) Significant update of the live work equipment management requirements including the electrical and mechanical testing requirements for "in-service" live work equipment.

(b) Alignment with ENA DOC 049 and ENA DOC 050 which reflect current industry best practice for the testing and maintenance of live work equipment.

(c) Consolidation of the periodic electrical testing intervals and reference Standards previously specified in the AS 5804 series into Table 12.14.3 of AS 5804.1:2025.

The inclusion of roles and responsibilities in AS 5804.4 was approved by Standards Australia's Production Management Group on 18/04/2024.

The terms "normative" and "informative" are used in Standards to define the application of the appendices to which they apply. A "normative" appendix is an integral part of a Standard, whereas an "informative" appendix is only for information and guidance.

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Introduction

This Standard has its origins in the former Electricity Supply Association of Australia (ESAA) documents:

(a) HB ESAA LLM 01—2000, *Guidelines for live line barehand work;*

(b) HB ESAA LLM 02—2000, *Guidelines for live line stick work;*

(c) HB ESAA LLM 03—2000, *Guidelines for live line glove and barrier w*ork; and

(d) ESAA ND/NL 04—1995, *Guidelines for use of helicopters for live line work*.

All but ESAA ND/NL 04—1995 were later published as Energy Networks Association (ENA) documents and have now been withdrawn.

This document does not constitute a high-voltage live work manual or set down high-voltage live work procedures and techniques. All procedures and techniques are developed by the network operator and service provider in accordance with this document.

Australian Standard®

High-voltage live work

Part 4: Barehand work

1 Scope and general

1.1 Scope

This document sets out the minimum industry standards for high-voltage live barehand work to ensure the safety of live workers and the public. The principles may be enhanced or supplemented, provided this does not result in reduced safety standards.

This document applies to all barehand work carried out on live high-voltage equipment.

1.2 Application

This document is intended for use by network operators and service providers.

This document shall be read in conjunction with AS 5804.1.

While this document applies to voltages from 66 kV up to and including 500 kV, the principle may be applied to lower voltages provided the correct minimum approach distances can be achieved and maintained.

1.3 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 1418.1, *Cranes, hoists and winches, Part 1: General requirements*

AS 1418.17, *Cranes, hoists and winches, Part 17: Design and construction of workboxes*

AS 5804.1, *High-voltage live work, Part 1: General*

AS 5804.3, *High-voltage live work, Part 3: Stick work*

AS/NZS 2210.3, *Personal protective equipment, Part 3: Safety footwear*

AS/NZS 2550.1, *Cranes, hoists and winches—Safe use, Part 1: General requirements*

IEC 60895, *Live working — Conductive clothing*

IEC 61057, *Live working — Insulating aerial devices for mounting on a chassis*

IEC 61478, *Live working — Ladders of insulating material*

IEC TS 61813, *Live working — Care, maintenance and in-service testing of aerial devices with insulating booms*

IEEE 1067, *In-service Use, Care, Maintenance, and Testing of Conductive Clothing for Use on Voltages up to 765 kV ac and +/–750 kV dc*

ANSI/SIA A92.2, *Vehicle-Mounted Elevating and Rotating Aerial Devices*