CSA Z462:24

National Standard of Canada

Workplace electrical safety

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Preface

This is the sixth edition of CSA Z462, *Workplace electrical safety.* It supersedes the previous editions published in 2021, 2018, 2015, 2012, and 2008.

This Standard is based on NFPA 70E, *Standard for Electrical Safety for the Workplace,* and has been harmonized with Parts I, II, and III of the *Canadian Electrical Code;* CSA Z460, *Control of hazardous energy — Lockout and other methods*; and CSA M421, *Use of electricity in mines*. This revised edition of CSA Z462 has been developed by CSA Group from the original edition as promulgated by the National Fire Protection Association (NFPA). In addition to its initial source, it includes significant revisions by CSA Group. This Standard is fully the responsibility of CSA Group. The NFPA, holder of the copyright in this edition, takes no responsibility for any portion thereof.

This Standard specifies requirements for and provides guidance on safety management systems, safe work procedures, and selection of personal protective equipment and other safety devices for persons exposed to hazards associated with energized electrical equipment. In addition, this Standard sets out criteria for the identification and training of qualified electrical workers and for determination of hazardous work to be performed only by those qualified individuals.

By permission of the NFPA, many of the clauses, tables, and figures in this Standard have been copied from NFPA 70E. CSA Group wishes to thank the NFPA for its support throughout the development of this Standard.

The following is an overview of the major revisions to the 2024 edition:

a) the definition of “arc rating” has been modified to include an arc rating limit for faceshields (Clause 3);
b) definitions for “laser”, “radiation, ionizing”, “radiation, non-ionizing”, and “temporary protective grounding equipment” have been added (Clause 3);
c) the requirements related to an electrically safe work condition were reorganized into three clauses (Clauses 4.1.6.1, 4.1.6.2, and 4.1.6.3);
d) the exception to the requirement to establish an electrically safe work condition (Clause 4.1.6.3) was revised to a single exception, i.e., when it is “not practicable” to do so, to align with Canadian occupational health and safety regulations;
e) added that the requirement to verify the absence of voltage must be done “at each point of work” (Clause 4.2.5);
f) added several items to the list of activities exempted from requiring an energized electrical work permit in Clause 4.3.2.3;
g) Table 2, which can be used to estimate the likelihood of occurrence of an arc flash incident for ac and dc systems, was relocated to Annex F as Table F.2;
h) the term “leather protectors” (as applied to gloves worn over rubber insulated gloves) has been changed to “protectors” throughout this Standard (Clauses 3, 4.3.5.6.2, 4.3.7.2.1, 4.3.7.3.7, 4.3.7.3.10, Q.4, and R.3.3, and Tables H.1 and H.2) to permit the use of protector gloves constructed of leather or materials other than leather, and a definition of “protectors” has been added to Clause 3;
i) the arc flash PPE category method requirements (Clause 4.3.7.3.15 and Tables 6A and 6B) were relocated to follow Table V.1 in Annex V as Tables V.2 and V.3, respectively, and the method was revised and retitled as the “arc flash PPE selection table method”;
j) a new figure was added to Annex V to provide guidance for the use of Table V.1, and several entries were added to Table V.1 to increase granularity;

