



CSA/ANSI NGV 5.1:23
National Standard of Canada
American National Standard



Residential fuelling appliances (RFA)



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M. Gust	Quantum Fuel Systems LLC, Lake Forest, California, USA <i>Category: Vehicle OEM/system manufacturer/ integrator/station packager</i>	
P. Horacek	Powertech Labs Inc., Surrey, British Columbia, Canada <i>Category: General Interest</i>	

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Preface

This is the third edition of ANSI/CSA NGV 5.1, *Residential fuelling appliances (RFA)*. It supersedes the previous editions published in 2016 and 2015.

The following are major changes to this edition:

- a) addition of coverage for ANG appliances, incorporating coverage from CSA IR-7-16;
- b) addition of Table [8](#) to address constituent limits and additional natural gas properties;
- c) addition of test gas requirements under Clause [8.2.1](#) for testing to apply the physical characteristics of CSA Group standards “Test Gas A” used in performance testing under other CSA Group standards with specific reference to Test Gas A heating value and specific gravity (shown in Table [5](#) and taken from CSA/ANSI Z21.47/CSA 2.3);
- d) removal of the test method for verifying material adhesion and legibility;
- e) harmonization of coverage to the extent possible with CSA/ANSI NGV 5.2; and
- f) additional language for accessibility.

CSA Group acknowledges that the development of this Standard was made possible, in part, by the financial support of Natural Resources Canada.

For general information on the Standards of the Canadian Electrical Code, Part II, see the Preface of CAN/CSA-C22.2 No. 0, *General Requirements — Canadian Electrical Code, Part II*.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was prepared by the Subcommittee on Residential Refuelling Appliances for Natural Gas Vehicles, under the jurisdiction of the Natural Gas Transportation Technical Committee, and has been formally approved by the Technical Committee, American National Standards Institute, and the Interprovincial/Territorial Gas Advisory Council.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
- 4) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include “Request for interpretation” in the subject line:*
 - a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
 - b) *provide an explanation of circumstances surrounding the actual field condition; and*
 - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.