



ANSI Z21.12-1990
(reaffirmed 2020)

Draft Hoods



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PREFACE

This publication represents a standard for safe operation, substantial and durable construction, and acceptable performance of draft hoods for gas appliances. It is the result of years of experience in the utilization of gas, supplemented by extensive research.

Nothing in this standard is to be considered in any way as indicating a measure of quality beyond compliance with the provisions it contains. It is designed to allow compliance of draft hoods for gas appliances, the construction and performance of which may exceed the various provisions specified herein. In its preparation, full recognition has been given to possibilities of improvement through ingenuity of design. As progress takes place, revisions may become necessary. When they are believed desirable, recommendations should be forwarded to the Chairman of Accredited Standards Committee Z21, 8501 East Pleasant Valley Road, Cleveland, Ohio 44131.

Safe and satisfactory operation of a draft hood depends to a great extent upon its proper application to a gas-fired appliance installation, and it should only be installed on a properly operating appliance in accordance with the draft hood manufacturer's installation instructions and local codes. General criteria for gas-fired appliance installations, including draft hoods, can be found in the National Fuel Gas Code, ANSI Z223.1, (NFPA 54), the Standard for Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances, ANSI/NFPA 211, and the Standard for Installation of Domestic Gas Conversion Burners, ANSI Z21.8.

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HISTORY OF THE DEVELOPMENT OF STANDARD FOR DRAFT HOODS

(This History is informative and is not part of the standard.)

Available records indicate that Sectional Committee Z21 of the American Standards Association was the first to undertake the development of construction and performance standards for draft hoods for use with gas-burning appliances.

In December 1931, the Z21 Committee authorized the appointment of a subcommittee to prepare such a standard. The Subcommittee on Listing Requirements for Draft Hoods held its initial meeting in April 1932. At the request of the subcommittee, the American Gas Association Laboratories conducted an extensive investigation relating to the design and performance of various types and sizes of draft hoods and reported its findings to the Committee.

A draft standard for draft hoods was completed by the subcommittee and approved by the Z21 Committee late in 1932. The draft standard was distributed to all interested parties and organizations for review and comment during December 1932. At its February 1933 meeting, the subcommittee reviewed the draft standard in light of comments received. The revised draft standard was considered by the Z21 Committee at its February 1933 meeting and certain portions of the draft standard were referred back to the subcommittee for further consideration and research. A further investigation was made by the American Gas Association Laboratories to procure additional data and information concerning the points raised. Subsequently, the draft standard was modified by the subcommittee at its April 1933 meeting, approved by the Z21 Committee at its June 1933 meeting and approved as the first edition of the American Standard for Listing Requirements for Draft Hoods by the American Standards Association in September 1933.

Certain types of draft hoods submitted to the American Gas Association Laboratories for listing under this standard indicated that the performance provisions were not applicable to all types of draft hoods. As a result, the subcommittee at its May 1935 meeting, requested the American Gas Association Laboratories to conduct a research investigation to provide information on the operation of draft hoods on gas converted central heating equipment and on gas water heaters.

In September 1936, the subcommittee reviewed the results of this investigation and redrafted the entire performance section of the draft hood

standard. The draft revisions were distributed for review and comment during October 1936. With some minor revisions, the revised standard was approved by the Z21 Committee in June 1937 and the second edition of the draft hood standard was approved as American Standard by the American Standards Association in October 1937.

At its March 1962 meeting, the Z21 Committee reassigned supervision of the draft hood standard to the Subcommittee on Listing and Installation Requirements for Domestic Gas Conversion Burners, because the draft hood standard had been predicated on draft hoods for use on existing appliances converted to operation with gas.

On August 24, 1966, the American Standards Association was reconstituted as the United States of America Standards Institute, and on October 6, 1969, was renamed the American National Standards Institute, Inc. As a result, the third edition of the draft hood standard, retitled American National Standard for Draft Hoods, was approved as American National Standard by the American National Standards Institute, Inc. in April 1971.

At its July 1979 meeting, the conversion burner subcommittee, in response to requests, agreed to broaden the scope of the draft hood standard, which was predicated on draft hoods for use on appliances converted from other fuels to gas, to also cover replacement draft hoods for use on gas-designed appliances. The draft standard, which was reorganized and expanded to be compatible with the draft hood coverage in the Z21 appliance standards, was distributed for review and comment in January 1980. The subcommittee reconsidered the proposed standard at its July 1980 meeting in light of comments received and, with some modifications, recommended it to the Z21 Committee. The revised standard was approved by the Z21 Committee at its April 1981 meeting. The fourth edition of the draft hood standard was approved as American National Standard by the American National Standards Institute, Inc., in November 1981.

Following the procedures outlined above, further revisions to this standard were developed in line with industry developments. This, the fifth edition of the draft hood standard, was approved as American National Standard by the American National Standards Institute, Inc., on January 22, 1990.

Previous editions of the draft hood standard, and addenda thereto, approved by the American National Standards Institute or its predecessor organizations are as follows:

Z21.12-1933	
Z21.12-1937	(R-1968)
Z21.12-1971	Z21.12a-1977
Z21.12-1981	Z21.12a-1983

NOTE: This 1990 edition of Z21.12 incorporates changes to the 1981 edition of Z21.12 and addenda thereto. Changes, other than editorial, are denoted by a vertical line in the margin.

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