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*NSF International Standard /
American National Standard*

NSF/ANSI 140 - 2019

Sustainability Assessment for Carpet



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NSF/ANSI 140 – 2019

NSF International Standard /
American National Standard
for Sustainability –

Sustainability Assessment for Carpet

Standard Developer
NSF International

Designated as an ANSI Standard
February 6, 2019
American National Standards Institute

Prepared by
The NSF Joint Committee on Sustainability

Recommended for adoption by
The NSF Council of Public Health Consultants

Adopted by
NSF International
October 2007

Revised November 2009
Revised March 2013

Revised October 2010
Revised August 2015

Revised September 2012
Revised August 2019

Published by
NSF International
PO Box 130140, Ann Arbor, Michigan 48113-0140, USA

For ordering copies or for making inquiries with regard to this Standard, please reference the designation "NSF/ANSI 140 – 2019".

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Foreword²

This American National Standard, NSF/ANSI 140 *Sustainability Assessment for Carpet*, has been developed as part of the ongoing efforts of a number of interested parties to document and improve the sustainability profile of carpet and rug products using established and/or advanced scientific principles, practices, materials, and standards. Stakeholders involved in developing the Standard included carpet and rug manufacturers, end users such as interior design professionals, state agencies responsible for environmentally preferable product procurement practices, academics, and nongovernmental organizations.

The purpose of this Standard is to establish consistent requirements for sustainable carpet products. These requirements are intended to form the basis of conformity assessment programs, such as third-party certification or registration.

This Standard has been designed, in part, to satisfy the following criteria:

- demonstrate how carpet and rug products can conform to the environmental, economic, and social principles of sustainability throughout the supply chain;
- demonstrate conformance with ISO Type 1 (ISO 14024) and Type 2 (ISO 14021) environmental labelling and declaration requirements;
- demonstrate conformance with the Federal Trade Commission (FTC) *Guides for the Use of Environmental Marketing Claims*;
- engender confidence in the various stakeholders (manufacturers, suppliers, regulators, and consumers) that products labeled with a third-party certification mark consistently meet the requirements of this program; and
- encourage participation by all manufacturers of carpets and rugs to maximize impact reductions and enhance environmental accomplishments.

This Standard does not address carpet packaging or the adhesives and padding that may be used in the installation of carpet products. This Standard does not address the cleanability of carpet products. Consideration will be given to the inclusion of these components of carpeting systems in this Standard as sustainability criteria are developed for these adjunct products and processes.

This version contains the following revisions:

Issue 27

This revision includes clean-up items, corrections and clarification of the Standard.

Issue 28

This revision updated credits in Sections 6, 7, 8, and 9.

Issue 29

This revision added definitions, updates, and the following new credits: 7.3, 7.3.1, 7.3.2, and 7.3.3

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Editorial corrections were made in Sections 10.2.1 and 10.2.2.

This revision also includes an editorial update to the names of the annexes within. The annexes are being changed from alpha characters to numeric, preceded by a 'Normative' or 'Informative'. The annexes have also been moved so the informative annexes follow the normative annexes. The table below shows the previous name of the annex with the corresponding new name of the annex:

| Annexes | |
|-----------------------------|---------------------------|
| Previously known as: | Now known as: |
| Annex A | Informative Annex 1 (I-1) |
| Annex B | Normative Annex 1 (N-1) |
| Annex C | Informative Annex 2 (I-2) |

Suggestions for improvement of this Standard are welcome. This Standard is maintained on a Continuous Maintenance schedule and can be opened for comment at any time. Comments should be sent to Chair, Joint Committee on Sustainable Carpet Assessment at standards@nsf.org, or c/o NSF International, Standards Department, PO Box 130140, Ann Arbor, Michigan 48113-0140, USA.

NSF/ANSI Standard for Sustainability –

Sustainability Assessment for Carpet

1 General

1.1 Purpose and goals

The purpose of this Standard is to provide a market-based definition for a path to sustainable carpet, to establish performance requirements for public health and environment, and to address the triple bottom line, economic-environmental-social, throughout the supply chain.

The goals of this Standard are to:

- increase the economic value of sustainable carpet throughout the supply chain by enhancing market demand for sustainable carpet products;
- provide information that enables specifiers to sort out the complex information on sustainability attributes;
- identify other consensus-based standards relevant to sustainable carpet;
- educate and instruct all stakeholders in the carpet supply chain; and
- encourage competition between manufacturers and their suppliers to seek out or develop environmentally preferable processes, practices, power sources, and materials.

This Standard is intended to help raw material suppliers, converters, manufacturers, and end-users. Adherence to this Standard and achievement of high levels of sustainable attribute performance can or should result in:

- credits from LEED (Leadership in Energy and Environmental Design) for Commercial Interiors, e.g., Indoor Environmental Quality credit 4.3, Materials and Resources credit 4, Innovation and Design credit 1):
 - design innovation;
 - product differentiation;
 - improved customer satisfaction;
 - product innovation;
 - improved indoor air quality and lower emissions;
 - ecological restoration;
 - enhanced health and safety for workers and consumers; and
 - measurable reductions in total environmental impact.

1.2 Scope

This Standard is intended to enable organizations throughout the carpet supply chain to apply performance requirements to achieve sustainable attributes and demonstrate compliance with levels of achievement through quantifiable metrics. The Standard is inclusive, is based on life cycle assessment (LCA) principles and provides benchmarks for continuous improvement and innovation.

This Standard is intended to allow inclusive participation and encourage the progressive movement of the carpet industry toward sustainability. This Standard identifies requirements of sustainable attribute performance and three levels of achievement by which carpet materials and products can be measured with respect to specific attributes that indicate progress toward sustainability.

While this Standard can be used on any carpet product, it is intended to be used for evaluation of commercial carpet products by providing a product evaluation methodology that is additive to emerging commercial green building standards.

This Standard does not apply to the packaging of sustainable carpets or to the adhesive or padding products used in the installation of carpet products.

This Standard is voluntary but emphasizes disclosure of information on both impacts and benefits of a carpet or carpet product from an environmental and sustainability perspective.

All products or processes can be found compliant to this Standard if they are able to achieve all prerequisites and score the minimum required for compliance as specified in Section 4.

2 Normative references and tools

The following documents contain provisions that, through reference, constitute provisions of this NSF/ANSI Standard. At the time this Standard was balloted, the editions listed below were valid. All documents are subject to revision, and parties are encouraged to investigate the possibility of applying the recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.

2.1 Normative references

AATCC Test Method 134-2006, *Electrostatic Propensity of Carpets*³

AATCC Test Method 16-2004, *Colorfastness to Light*³

ASTM D5252-05, *Standard Practice for the Operation of the Hexapod Drum Tester*⁴

ASTM D1335-05, *Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings*⁴

ASTM D3936-05, *Standard Test Method for Resistance to Delamination of the Secondary Backing of Pile Yarn Floor Covering*⁴

ASTM E648-06a, *Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source*⁴

³ American Association of Textile Chemists and Colorists. PO Box 12215, Research Triangle, NC 27709-2215. <www.aatcc.org>

⁴ ASTM International. 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. <www.astm.org>