



SCS Certification Standard for Rigid Core Resilient Flooring



Version 2.1 – April 2026



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Record of Revisions

This Standard is periodically updated. It is the responsibility of the document reader to ensure the use of the most current version of the document.

Table 1. List of changes made in the current version 2.1 of SCS-111, since the previous version.

Version:	Release date:	Remark/changes:
V1.0	May 2020	Original version
V2.0	October 2025	■ Changed name to SCS-111 Certification Standard for Rigid Core Resilient Flooring ■ Updated branding and format ■ Moved Certification Body Requirements to a separate document ■ Added requirement for ASTM F3781 - Standard Test Method for Measurement of the Fracture Resistance of a Modular Resilient Flooring's Profiled Edge(s) to an Applied Vertical Force
V2.1	April 2026	■ Technical correction: added pass/fail threshold for ASTM F3781 test

1. Introduction

1.1 Purpose

- 1.1.1 This Standard, SCS-111, was developed for the Resilient Floor Covering Institute (RFCI) to allow manufacturers of rigid core resilient flooring to give their customers the highest level of confidence about the safety of rigid core resilient flooring for their homes through certification. Manufacturers can demonstrate that their products meet voluntary and regulatory building requirements for indoor air quality, rigidity, durability and performance, and low heavy metals and ortho-phthalates content. SCS-111 builds on the popular certification for indoor air quality in flooring, FloorScore®. Products that have already achieved FloorScore certification can easily obtain SCS-111 certification with supplemental testing and product review. Manufacturers who carry SCS-111 certification can carry the RFCI trademarked label: ASSURE® Certified.

1.2 Intended Users

- 1.2.1 This Standard is applicable to manufacturers of rigid core resilient flooring that are seeking to demonstrate their products meet the most current versions of the following standards and certification programs:
- ASTM F3261 Standard Specification for Resilient Flooring in Modular Format with Rigid Polymeric Core
 - ASTM F3781 Standard Test Method for Measurement of the Fracture Resistance of a Modular Resilient Flooring's Profiled Edge(s) to an Applied Vertical Force.
 - CDPH/EHLB/Standard Method Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Emission testing method for California Specification 01350
 - CPSC – CH – C1001-09.4, Standard Operating Procedure for Determination of Phthalates or GB/T 22048-2022 or ASTM F3414 Standard Test Method for Determining Ortho-Phthalate Concentration in Flooring Containing Polyvinyl Chloride (PVC)
 - CONEG Toxics in Packaging using EPA SW 846 Test Method 3052, Microwave Assisted Acid Digestion of Siliceous and Organically Based Matrices or ASTM F963 Standard Consumer Safety Specification for Toy Safety, Section 8.3.1.4
 - SCS-105 Certification Standard for Indoor Air Quality Flooring, Building Products, Furniture

1.3 Language

- 1.3.1 The verb “shall” is used in criteria to indicate a requirement of the standard. The term “should” is used to indicate a recommendation. The verb “can” is used to express an ability to perform an action. The verb “may” is used to express permission to perform an action that is not a requirement. The verb “might” is used to express a condition that could potentially exist.

2. Scope and Limitations

2.1 Scope

- 2.1.1 Products eligible for certification are expanded polymer core (WPC), and solid polymer core (SPC) rigid core resilient flooring that are:
- For use in commercial and residential buildings;
 - Typically in tiles or planks format, or both;
 - Surface decorated or printed and protected by a clear wear layer; and
 - Inclusive of a polymeric rigid core as part of the product structure.
- 2.1.2 Rigid core resilient flooring that utilizes an attached underlay backer for reduced noise and for reducing issues concerning minor subfloor irregularities is also eligible for certification.

2.2 Limitation

- 2.2.1 This Standard does not address all of the safety, health, comfort (e.g., odor), and functional performance concerns, if any, associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety, health, and other performance conditions and to determine the applicability of regulatory limitations prior to use.
- 2.2.2 The Standard does not address short-term occupational exposures incurred during construction or renovation.
- 2.2.3 This Standard is voluntary. It is not intended to replace any legal or regulatory requirements that may be applicable to user operations.
- 2.2.4 The Standard does not address any environmental tradeoffs that may be associated with the life-cycle phases of the product(s). Therefore, there may be environmental tradeoffs associated with a certified entity and/or the product it produces.

3. Conformance

3.1 Conformance to the Standard

- 3.1.1 To be considered conformant to this Standard, the client shall meet all applicable requirements.
- 3.1.2 The client shall undergo an annual audit against this Standard by an SCS Standards-approved certification body that follows the SCS-111 Certification Body Requirements.
- 3.1.3 To support conformance with SCS-111, the client can leverage their FloorScore certification.

3.2 Complaints and Appeals

- 3.2.1 A client has the right to appeal a certification decision within 30 days of receiving the final report. Appeals shall be submitted to the certification body for evaluation and resolution.
- 3.2.2 Complaints shall be handled directly by the approved certification body. If a satisfactory resolution is not found, a complaint may be elevated to SCS Standards.

4. References

References in Section 4.0 are to the current version of the listed documents, as they may be modified, updated, and/or amended and republished from time to time, unless otherwise specified.

- ASTM F3261, Standard Specification for Resilient Flooring in Modular Format with Rigid Polymeric Core
- ASTM F141 Standard Terminology Relating to Resilient Floor Coverings
- ANSI/ASQ Z1.4-2003(R2018) Sampling Procedures and Tables for Inspection by Attributes
- ASTM F387 Standard Test Method for Measuring Thickness of Resilient Floor Covering With Foam Layer
- ASMT F410 Standard Test Method for Wear Layer Thickness of Resilient Floor Coverings by Optical Measurement
- ASTM F925 Standard Test Method for Resistance to Chemicals of Resilient Flooring
- ASTM F970 Standard Test Method for Measuring Recovery Properties of Floor Coverings after Static Loading
- ASTM F1514 Standard Test Method for Measuring Heat Stability of Resilient Flooring by Color Change
- ASTM F1515 Standard Test Method for Measuring Light Stability of Resilient Flooring by Color Change
- ASTM F1914 Standard Test Methods for Short-Term Indentation and Residual Indentation of Resilient Floor Covering
- ASTM F2055 Standard Test Method for Size and Squareness of Resilient Floor Tile by Dial Gauge Method
- ASTM F2199 Standard Test Method for Determining Dimensional Stability and Curling Properties of Resilient Flooring after Exposure to Heat
- ASTM F963 Standard Consumer Safety Specification for Toy Safety, Section 8.3.1.4
- ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine
- ASTM F3781 Standard Test Method for Measurement of the Fracture Resistance of a Modular Resilient Flooring's Profiled Edge(s) to an Applied Vertical Force.
- ISO 17025 General requirements for the competence of testing and calibration laboratories

- ISO 23999 Resilient floor coverings — Determination of dimensional stability and curling after exposure to heat
- ISO 24337 Laminate floor coverings — Determination of geometrical characteristics
- CDPH/EHLB/Standard Method Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Emission testing method for California Specification 01350
- CPSC – CH – C1001-09.4, Standard Operating Procedure for Determination of Phthalates or 4 or GB/T 22048-2022 or ASTM F3414 Standard Test Method for Determining Ortho-Phthalate Concentration in Flooring Containing Polyvinyl Chloride (PVC)
- CONEG Toxics in Packaging in Heavy Metals
- EPA SW 846 Method 3052, Microwave Assisted Acid Digestion of Siliceous and Organically Based Matrices
- SCS-105 Certification Standard for Indoor Air Quality: Flooring, Building Products, Furniture (also known as FloorScore)

5. Terminology

Below are the key terms and definitions, acronyms, and abbreviations related to this Standard.

5.1 Acronyms and Abbreviations

- ASTM – ASTM International (formerly, American Society for Testing and Materials)
- BREEAM – Building Research Establishment Environmental Assessment Method
- CDPH – California Department of Public Health
- CHPS – Collaborative for High Performance Schools
- CONEG – Coalition of Northeastern Governors
- CPSC – U.S. Consumer Product Safety Commission
- CREL – Chronic Reference Exposure Level
- EHLB – Environmental Health Laboratory Branch
- EPA – U.S. Environmental Protection Agency
- GB/T – Guobiao/tuǐjiàn (recommended Chinese national standard)
- IAQ – Indoor Air Quality
- IEC – International Electrotechnical Commission
- ISO – International Organization for Standardization
- LEED – Leadership in Energy and Environmental Design
- PPM – Parts per million
- RFCI – Resilient Floor Covering Institute
- SPC – Solid Polymer Core
- SW – Solid waste

- VOC – Volatile Organic Compound
- WPC – Expanded Polymer Core

5.2 Terms and Definitions

Approved Laboratory: An ISO 17025-accredited laboratory that has been qualified by the certification body to conduct and report emissions testing for use in a certification assessment.

Audit: A third-party evaluation conducted by an approved certification body against this Standard. An audit can include the review of documents and records, interviews, and observations.

Certification: A third-party attestation related to products, processes, systems, or persons.

Certification Decision: A decision made by an authorized decision-making entity to grant, maintain, renew, suspend, reinstate, or expand/reduce the scope of a certification.

Certification Label: A label incorporating the certification mark awarded by the certification body.

Certified: The status afforded to a client in possession of a valid certificate, where privileges to use the certification marks in accordance with the SCS-111 program are granted.

Certified Product: A product that is in full conformity with the requirements of the SCS-111 Standard, and for which the manufacturer is authorized to apply the certification label.

FloorScore: FloorScore is a recognized indoor air quality (IAQ) certification standard for hard surface flooring materials, adhesives, and underlayments developed by SCS with the [Resilient Floor Covering Institute](#) (RFCI), a leading industry trade association of flooring manufacturers and suppliers. It qualifies for many green building schemes, including LEED, WELL, BREEAM, CHPS, and Green Globes.

Client: An entity that seeks the services of the SCS-111 program. This entity could be an applicant or an existing certified operation.

On-Site Audit: An audit conducted in person at the client's manufacturing site.

Polymeric Rigid Core: The material layer that provides thickness, stiffness, dimensional stability, and other properties needed for the finished resilient flooring. Note - The polymeric rigid core layer is an inner layer of the flooring located below the décor layer (e.g., wear layer, décor, polymeric rigid core, and backer).

Representative Product Sample: A product sample that is representative of the product manufactured and produced under typical operation conditions.

RFCI Rigid Core Resilient Flooring Certification Mark: A trademark that is used for on-product and off-product labelling.

Resilient Flooring with Polymeric Rigid Core: A rigid floor covering, typically in a plank or tile format, having a multiple-layer product structure, for example, wear layer, décor, polymeric rigid core, or backer(s), or combination thereof. The planks/tiles have worked edges that allow the product to be joined or butted together to form a larger integral unit. The product may vary in thickness, size, surface texture, and gloss. Resilient flooring with polymeric rigid core does not include products having textile or non-resilient surfaces such as wood, stone, metal, etc.

Rigid Core Resilient Flooring: A rigid floor covering, typically in a plank or tile format, having a multiple-layer product structure, for example, wear layer, decor, polymeric rigid core, or backer(s), or combination thereof.

Rigid “SPC” (Solid Polymer Core) Products: Rigid products that meet the general definition of “resilient flooring with polymeric core” but also exhibit no significant porosity or intentional cellular structure in the polymeric core layer. The SPC rigid core helps improve properties such as thickness, indentation resistance, and easier installation. SPC is also known in the industry as “Stone Plastic Composite.”

Rigid “WPC” (Expanded Polymer Core) Products: Rigid products that meet the general definition of “resilient flooring with polymeric core” but also specifically include an intentional cellular structure (foam structure) in the polymeric core layer to help improve properties such as thickness, reduced weight, improved acoustical properties, and easier installation. These products are also sometimes referred to as Expanded Polymer Core (EPC) products. WPC is also known in the industry as “Wood Plastic Composite.”

Standard: A state, national, or international standard or specification against which certification is granted or which comprises part of a certification program.

Supplier: An organization that supplies a product or service to the manufacturer.

Third Party: A person or body that is recognized as being independent of the parties involved, as concerns the issue in question.

Certification Requirements

6. General Product Certification Requirements

6.1 Management System

- 6.1.1 The client shall develop, maintain, and implement a quality management system that includes:
- a) Up-to-date records of all relevant product formulations and suppliers.
 - b) A procedure to ensure products stay within the product formulation and specification (e.g., production quality check, internal audit reports, etc.).
 - c) A procedure to handle any nonconforming products, including identification, segregation, corrective action, and disposal.
 - d) A procedure to identify products and trace products from the final product to raw materials.
 - e) A procedure to identify and manage production variability to ensure continued conformity of products.
- 6.1.2 The client shall develop and maintain a description (narration or flowchart) of its production process(es), covering all steps from receiving to shipping.
- 6.1.3 The client shall provide an affidavit confirming that they have not intentionally added lead, mercury, cadmium, and hexavalent chromium to the product in the manufacturing process.

6.2 Product Testing

- 6.2.1 All products shall be tested by an ISO/IEC 17025 accredited laboratory that is approved by the certification body for indoor air quality emissions, material content, and performance testing.
- 6.2.2 The client shall collect, prepare, and ship the sample(s) to the laboratory following the sampling and testing plan and instructions provided by the certification body. The client shall notify the certification body when samples are shipped for testing.
- 6.2.3 For VOC emission testing, products shall be modeled for classroom and private office parameters and shall be within the VOC emission concentration limits outlined in CDPH/EHLB Standard Method v1.2, section 4.2.
- 6.2.4 For performance testing, products shall meet ASTM F3261-criteria.
- 6.2.5 For heavy metals testing, products shall be tested for lead, hexavalent chromium, cadmium, and mercury per the test method EPA SW 846 Method 3052. Products shall not exceed the limits of 100 PPM by combined weight.

- 6.2.6 For ortho-phthalate testing, products must be tested per CPSC-CH-C1001-09.4 or GB/T 22048-2022. Products shall not exceed 1,000 PPM for individual or total ortho-phthalates.
- 6.2.7 The client shall use the ASTM F3781 Standard Test Method for Measurement of the Fracture Resistance of a Modular Resilient Flooring's Profiled Edge(s) to an Applied Vertical Force. Products with profiled interlocking edges shall demonstrate that the edge profiles meet or exceed a minimum requirement of 17-pound force (lbf) of vertical deflection strength.

7. Claims and Labelling

7.1 General Conformance Requirements

- 7.1.1 All claims language and/or label (e.g., RFCI logo) usage, including private labels, shall:
- a) Be reviewed and approved by the certification body prior to use.
 - b) Conform to the certification body's labeling and language requirements.
 - c) Comply with relevant regulatory guidelines (e.g., U.S. Federal Trade Commission, EU Empowering Consumers for the Green Transition Directive).
- 7.1.2 Any claims made by the client in connection with this Standard shall only be in reference to its own certification.

7.2 Acceptable Claims

- 7.2.1 The ASSURE® Certified rigid core resilient flooring certification mark may be applied to a certified product (see the certification body's claims language guidelines for full claims language, which is provided after certification is granted).
- 7.2.2 Private Label Claims
- a) Private label owners shall be permitted to use the certification label as a pass-through certified claim only.
 - b) Private label owners shall obtain permission for private label use from the approved certification body and may be subject to administrative fees for using the certification label.
 - c) The approved certification body shall manage and monitor private label usage.
 - d) Private label owners are not permitted to make any changes to the final product before it is sold, or embellish any environmental claims associated with the product. This means that private-labeled products shall be identical to the certified products in their materials, specifications, formulations, and manufacturing processes and shall not be altered by either the manufacturer or purchasing company.