Designation: F141 - 23

## Standard Terminology Relating to Resilient Floor Coverings<sup>1</sup>

This standard is issued under the fixed designation F141; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon  $(\varepsilon)$  indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the U.S. Department of Defense.

## 1. Referenced Documents

1.1 ASTM Standards:<sup>2</sup>

F1066 Specification for Vinyl Composition Floor Tile

F1303 Specification for Sheet Vinyl Floor Covering with Backing

F1344 Specification for Rubber Floor Tile

F1700 Specification for Solid Vinyl Floor Tile

F1859 Specification for Rubber Sheet Floor Covering Without Backing

F1860 Specification for Rubber Sheet Floor Covering With Backing

F1913 Specification for Vinyl Sheet Floor Covering Without Backing

F2034 Specification for Sheet Linoleum Floor Covering

F2195 Specification for Linoleum Floor Tile

## 2. Terminology

2.1 Terms and Definitions:

**above-grade,** *adj*—above the surface of the ground, *as related to floor location*, above a well-ventilated space with at least 18 in. (457.2 mm) between the bottom of the lowest horizontal structural member and any point of the ground.

**abrasion,** *n*—wearing, grinding, or rubbing away by friction.

**acclimation,** *v*—the process in which materials adjust to environmental conditions such as ambient temperature and humidity prior to installation.

**across machine direction,** *n*—the direction perpendicular to which a product moves through the manufacturing process.

**asphalt tile,** *n*—an obsolete floor surfacing unit composed of asphalt or hydrocarbon resins, or both, crysotile asbestos fibers, mineral fillers, and pigments.

**below-grade**, *adj*—below the surface of the ground, *as related to floor location*, part or all of the floor is below the ground.

**cellular concrete,** *n*—a light weight flooring substrate material which utilizes a hydraulic cement as the binder and has a homogeneous void or cell structure attained using gas forming chemicals or foaming agents.

concrete, n—a hard, strong material made by mixing a cementing material (commonly portland cement) and a mineral aggregate (as washed sand and gravel or broken rock) with sufficient water to cause the cement to set and bind the entire mass.

coefficient of friction—the ratio of the tangential force that is needed to start or maintain uniform relative motion between two contacting surfaces to the perpendicular force holding them in contact. (See DCOF and SCOF in 2.2 for clarification.)

**cork tile,** *n*—a floor surfacing unit made from natural cork shavings compressed and baked to be thoroughly and uniformly bonded together.

**cushioned vinyl flooring,** *n*—any vinyl sheet floor covering incorporating a foam layer as part of its construction.

**dimensional stability,** *n*—the ability of a resilient flooring to retain its original dimensions during the service life of the product.

Discussion—This property is usually measured by: (1) temperature-induced dimensional change—the alteration in linear dimensions as a result of exposure to a significant variation in temperature followed by a return to original conditions; or (2) moisture-induced dimensional change—the alteration in linear dimensions as a result of exposure to a significant variation in moisture.

**drying room yellowing,** *n*—a yellowish cast on linoleum resultant from the oxidation process that will go away with light exposure. Without continued light exposure, the cast may reappear.

**dynamic coefficient of friction**—the ratio of the tangential force that is needed to maintain uniform relative motion between two contacting surfaces to the perpendicular force holding them in contact (DCOF).

**embossed,** *adj*—having a permanent multilevel surface produced by mechanical or chemical means.

<sup>&</sup>lt;sup>1</sup> This terminology is under the jurisdiction of ASTM Committee F06 on Resilient Floor Coverings and is the direct responsibility of Subcommittee F06.10 on Terminology.

Current edition approved Aug. 1, 2023. Published October 2023. Originally approved in 1971. Last previous edition approved in 2020 as F141–12 (2020). DOI: 10.1520/F0141-23.

<sup>&</sup>lt;sup>2</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

- **flexibility,** *n*—the ability to be bent, turned, or twisted without cracking, breaking or showing other permanent damage and with or without returning of itself to its former shape.
- **friction,** *n*—resistance to the relative motion of one body sliding or rolling over another with which it is in contact.
- **gouge,** *n*—a groove or cavity in the flooring surface accompanied by material removal and penetration below the immediate flooring surface.
- **heat welded seam,** *n*—a seam produced by grooving abutting edges of resilient flooring and filling said groove(s) with heated, fused, or melted material to provide a bond and seal. A glazing or top coating may be applied after the seam is trimmed.
  - Discussion—Excess welding material is trimmed flush with the finished flooring after cooling.
- **heterogeneous**, *adj*—consisting of dissimilar ingredients, constituents or compositions.
- **heterogeneous resilient flooring,** *n*—a resilient floor surfacing material consisting of layers of dissimilar compositions or colors, or both.
- homogenous rubber flooring, *n*—a rubber floor surfacing material, in sheet or tile form, that is of uniform structure and composition throughout. It usually consists of compounded natural or synthetic rubbers, or both, in combination with mineral fillers, pigments, and other additives. See Specifications F1344, F1859 and F1860.
- homogeneous vinyl flooring, *n*—a floor surfacing material in sheet or tile form that is of uniform structure and composition throughout. It usually consists of vinyl plastic resins, plasticizers, fillers, pigments and stabilizers. See also Specification F1913.
- **hydraulic cement,** *n*—a binder system used in concrete subfloor assemblies that harden by chemical reaction with water and is capable of doing so even under water.
- **injection molded flooring**—a floor surfacing material made by driving or forcing a polymeric compound into a mold.
- **inlaid sheet flooring,** *n*—a floor surfacing material in which the decorative pattern or design is formed by colored areas set in to the surface. The design so formed may or may not extend through to a backing. See also Specifications F1303 and F1913.
- **lightweight concrete**, n—concrete with a density of less than 115 lb/ft<sup>3</sup> (1840 kg/m<sup>3</sup>).
- **linoleum,** *n*—a surfacing material composed of a solidified mixture of linseed oil, pine rosin, fossil or other resins or rosins, or an equivalent oxidized oleoresinous binder, ground cork, wood flour, mineral fillers, and pigments, bonded to a fibrous or other suitable backing. See also Specifications F2034 and F2195.
- **linoleum cement**—the binder in linoleum consisting of a mixture of linseed oil, pine rosin, fossil or other resins or rosins, or an equivalent oxidized oleoresinous binder.

- **lippage,** *n*—abrupt, height difference in elevation between edges of adjacent resilient flooring, usually as it relates to installed tile.
- **luxury vinyl tile (LVT)**, *n*—a marketing term that is applied to resilient floor tile products.
- **machine direction**, *n*—the direction in which a product moves through the manufacturing process.
- mar, n—a mark made on the flooring surface by the deposition of material from friction or rubbing of traffic bodies against the surface.
- **oleoresin**, *n*—a plant product containing chiefly essential oil and resin.
- on-grade—in contact with the ground, as related to floor location, in contact with the ground or with less than 18 in. (457.2 mm) of well-ventilated space between the bottom of the lowest horizontal structural member and any point of the ground.
- **patching compound,** *n*—compound used to fill or smooth minor depressions or irregularities in a flooring surface.
- **plank**, *n*—a form of resilient floor covering having an aspect ratio greater than 2:1.
- polymeric poured (seamless) floors, *n*—a floor surfacing material composed of polymeric materials applied to the substrate in liquid form alone or in combination with mineral or plastic aggregates, desiccants, or fillers.
- **polyolefin**—a polymer prepared by the polymerization of an olefin(s) as essentially the sole monomers(s). (D20)
- post-consumer recycled content, *n*—the portion, often expressed as a percent by weight, of material used in the manufacture of a new product, where the material ex. works has been recovered or otherwise diverted from disposal.<sup>3</sup>
- pre-consumer recycle content, *n*—material recovered or diverted from industrial waste streams for use in the manufacture of a new product or a product made by a new process, often expressed as a percent by weight. This excludes materials and by-products generated from and commonly reused or reworked within the original manufacturing process.<sup>3</sup>
- **printed sheet vinyl flooring,** *n*—a floor surfacing material which has a printed pattern and is protected with a wearlayer of transparent or translucent vinyl plastic. The wearlayer may also include a specialty performance top coating.
- recycled content, *n*—the sum, normally expressed as a percent by weight, of post-industrial or pre-consumer recycled material plus post-consumer recycled material.<sup>3</sup>
- **resilient,** *adj*—tending or able to recover from strain or deformation caused especially by compressive stress.

<sup>&</sup>lt;sup>3</sup> See the U.S. Federal Trade Commission Document CFR Part 260 - Guide for the Use of Environmental Marketing Claims for additional information and examples. This document can be found at http://www.ftc.gov/os/1996/10/16cfr260.htm.