



VPI Tile and Cleanrooms

It is **very important** to emphasize that there are **no** recognized or independent tests to certify that **any** type of floor covering complies with:

1. ISO cleanroom particle size classifications

or

2. FED STD 209E cleanroom particle size classifications (This standard is obsolete as of November 29th, 2001 although wide spread use continues. See the reference table below)

To emphasize, both the ISO and Federal standards were and are designed to measure:

> **air quality in the total cleanroom working environment**

and NOT

> **the particulates emitted from any one item in the cleanroom.**

Accordingly, these standards **cannot be applied** to any flooring materials in isolation.

However, with this understanding and qualification:

VPI certifies that VPI tile can be used in:

ISO 1–9 classified cleanrooms

and

FED STD 209E 1–100,000 classified cleanrooms

For Reference Only: ISO and FED STD 209E Cleanroom Classifications

ISO Class	maximum particles/m3						FED STD 209E equivalent
	≥0.1 μm	≥0.2 μm	≥0.3 μm	≥0.5 μm	≥1 μm	≥5 μm	
ISO 1	10	2.37	1.02	0.35	0.083	0.0029	No classification
ISO 2	100	23.7	10.2	3.5	0.83	0.029	No classification
ISO 3	1,000	237	102	35	8.3	0.29	Class 1
ISO 4	10,000	2,370	1,020	352	83	2.9	Class 10
ISO 5	100,000	23,700	10,200	3,520	832	29	Class 100
ISO 6	1.0×10 ⁶	237,000	102,000	35,200	8,320	293	Class 1,000
ISO 7	1.0×10 ⁷	2.37×10 ⁶	1,020,000	352,000	83,200	2,930	Class 10,000
ISO 8	1.0×10 ⁸	2.37×10 ⁷	1.02×10 ⁷	3,520,000	832,000	29,300	Class 100,000
ISO 9	1.0×10 ⁹	2.37×10 ⁸	1.02×10 ⁸	35,200,000	8,320,000	293,000	Room air

US FED STD 209E was obsoleted by the General Services Administration (GSA) and the US Department of Commerce on November 29, 2001. Nevertheless, many organizations continue to reference US FED STD209E