

When you only want the best, we'll be there.



The VPI Story







Since day one, it's about quality, service and innovation

Whether you're an architect, designer, distributor, or installer, you can depend on VPI to provide three important things:

- 1. Great flooring products
- 2. World-class service
- 3. Industry expertise and technical excellence

We're known for the creation of the industry's original static control flooring— Conductile® and Statmate™— way back in 1949. We're also known for precision and quality in all of our products: flooring tile, wall base, rubber flooring, and accessories to complete the job.

Through the years, we've become more than just a flooring vendor, but a partner and consultant. Maybe that's because we hold our products up to levels of performance that exceed industry norms. The same goes for our people—you'll see it first-hand in our service and knowledge.

Today, we continue to offer the industry's best flooring products and everything that goes with them: The best choices, options, warranties, and service. From stringent testing procedures and quality checks to incredible precision in the end product, it's what you expect, and what we demand.

So whether this is your first specification of VPI products or if you've been counting on us for decades, one thing remains true:

When you only want the best, we'll be there.

Seeing Green

How a quality product that's built to last is ultimately the best environmental choice

Just How Green Is Green? VPI Goes to the Next Level.

Our up-front focus on quality means our products are durable and tough, with a very long life cycle in their intended applications. The result? A diminished need to extract new resources and expend energy in the manufacture of replacement products.

It's certainly no surprise that environmental concerns have come to the forefront of virtually every aspect of modern life. At VPI, we remain committed to this important directive, and fully understand the role we play working in partnership with you.

We also understand that environmental responsibility is a complex subject, often requiring us to consider many different perspectives.

When manufacturers tout the benefits of recycling, they often overlook the impact of the recycling process: Energy is consumed, waste is created, and additional resources are used. Granted, this process may use less energy and resources than creating new products, but an overall negative impact on the environment is often the result. So while recycling is typically presented as an environmentally responsible practice, there's a bigger question: Isn't continued use of a high-quality product better than recycling?

Sustainability Is Paramount

Consider a typical paper coffee cup, one that's made of recycled material and is also recyclable. Unquestionably, it offers sound environmental responsibility. But isn't a ceramic mug—one that can be used repeatedly for decades—an even better environmental choice?

Preventing waste—not simply recycling waste—is the real solution to a healthy planet. Unlike many flooring products available today, our tile lasts decades, not just a few years. And that means replacement and recycling isn't required. Instead, we offer sustainability, a solution that makes sense from financial and environmental perspectives. Simply, our belief is that while recycling is better than throwing something away, the greenest solution is using a product that lasts and lasts.

Our Facility: Setting the Standard

- We generate almost no waste for landfills (less than 2%). All product trim and rework is reused within the product, other products, or used within other manufacturing processes.
- We don't use heavy metals in pigments or stabilizers.
- We meet all applicable guidelines of the State of Wisconsin's progressive environmental and refuse laws.
- We recycle water used in the manufacturing process in a closed-loop system.
 - We use recycled packaging for our products, containing up to 100% recycled content.

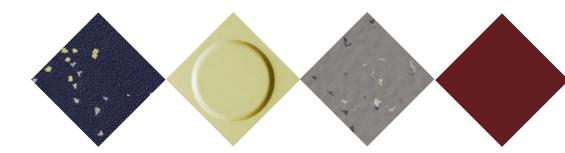
Our Products: Sustainability for the Long Haul

- Durability and outstanding quality provides a long life cycle, without the need to use new products.
- No waxing requirements means no environmental impact from waxing, and no damage caused by corrosive stripping.
- Most of our adhesives have zero to very low emissions of Volatile Organic Compounds (VOCs). (Please refer to our website for specific details.)

Our Standards: More than Just a Promise

Year after year, we maintain our commitment to strict eco-compatible manufacturing, packaging and recycling programs. Unlike others, we've made sure our compounds contain no asbestos, cadmium, CFCs, lead or formaldehyde. Simply, at VPI, giving customers eco-friendly options is our way of doing business.





Static Control Flooring

As the first-ever manufacturer of static control flooring, we bring experience and insight no one else can match. Developed decades ago and in continual refinement, Conductile® and Statmate™ are *still* the premier static flooring solutions on the market. In fact, VPI Static Control Tile installed over 60 years ago still performs to the same specifications as the day it was installed, retaining its conductive and dissipative properties indefinitely. For applications that require electrostatic discharge protection and/or low outgassing (like electronics assembly, health care, and clean rooms), VPI Static Control Flooring is a perfect choice.





Features

Compliance

VPI tiles meet or exceed all federal, ASTM and ESD Association specifications for electrical resistance. After installation, a Certificate of ESD Compliance can also be issued for complete peace of mind in the most demanding and critical applications.

Lifetime "forever" electrical warranty

Our ESD tiles are guaranteed to work as long as the tile is installed!

75-year wear warranty

VPI tiles are warranted for 75 years regarding failure due to workmanship or materials. This is the longest warranty in the industry for any resilient floor.

Top-quality materials

VPI ESD control tiles are made only from certified high-quality materials to assure a lifetime of reliable and consistent technical performance.

Superior physical resistance

Our ESD tiles can endure loads of up to 2,500 psi offering unmatched durability. They offer a lifetime of abrasive resistance to chipping and marring, unlike other products with lower vinyl content.

Extreme resistance to many chemicals

Including betadine, acids, strong alkalis, alcohols, aliphatic solvents and a variety of organic and synthetic fats.

Eco-consciousness

VPI tiles are the greenest resilient tiles on the market today. Sustainable and earth friendly, VPI tiles create less carbon foot printing through the product lifecycle than many other more expensive, lower quality "green wash" products.

Ease of installation and a beautiful appearance

Conforming to subfloor irregularities without cracking or breaking, our "Micro Squared" highly flexible tiles are extremely easy to install. And after installation, the appearance simply blossoms. In fact, many customers choose our tiles when they *don't* need static control—just a great-looking floor that lasts a lifetime and requires very little maintenance.

Variety of installation choices:

12 x 12 x ½

24 x 24 x 1/8

36 x 36 x 1/8

Pre-grooving available (24's and 36's only) Access flooring tiles available

Adhesive is included

All orders include appropriate amounts of VPI #150 Conductive Epoxy Adhesive or VPI #160 Conductive Acrylic Adhesive.

No copper strip grid required

The VPI system only requires a single two-foot copper strip every 2,000 square feet to ensure complete grounding. Other ESD systems require an extensive grid system to be installed before tile installation.

No wax requirements

Unlike other flooring tiles, our static control tiles do not require wax or glaze to maintain their electrical properties. No wax is also great for the environment.

Product Standards That Lead the Industry



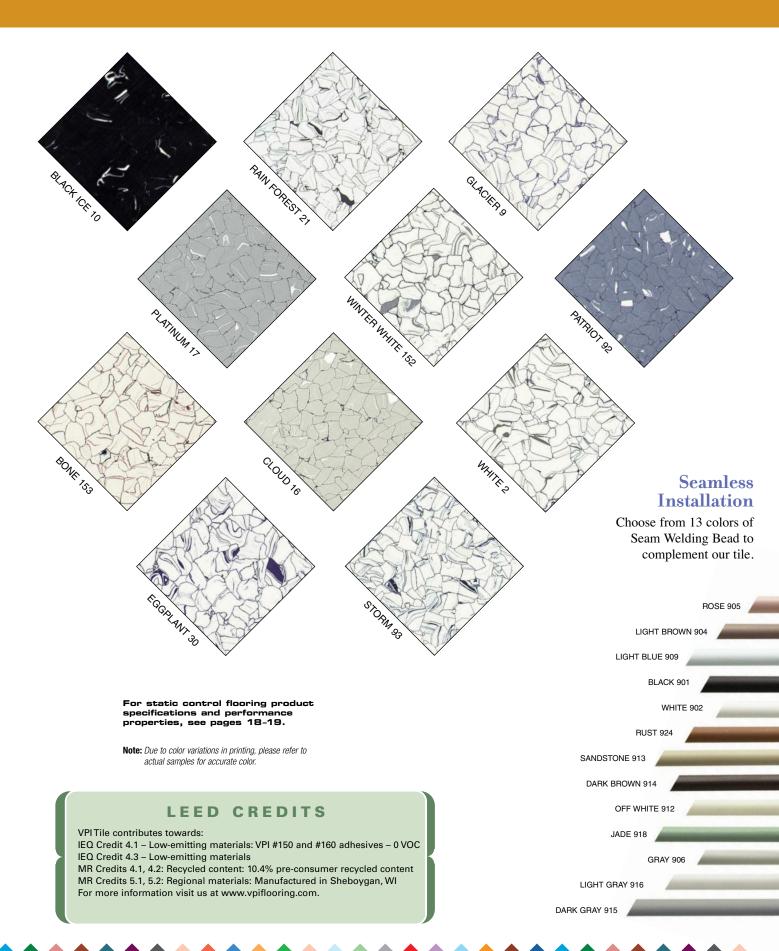












Static Control Flooring

With the same physical and installation properties, there are key differences between VPI Conductile® and Statmate™ ESD tiles:



Conductive Tile

- 25,000 to 1,000,000 ohms resistance
- **Fastest static decay**—up to 20 times faster than static dissipative tiles
- For use with highly sensitive equipment and critical applications
- Suited for printed circuit and chip manufacturing
- 2,500 psi load rating



Static Dissipative Tile

- 1,000,000 to 100,000,000 ohms resistance
- Slower static decay—up to 20 times slower than conductive tiles
- Not for use with highly sensitive equipment and critical applications
- Not suited for uses with exposed circuits or chips
- 2,500 psi load rating

Conductile® vs. Statmate™: Which Is the Right Tile for You?

To understand the differences and the choices between static dissipative and conductive tiles, it's important to understand the history of static control flooring.

Originally, VPI invented "no-wax" static control tile back in the late 1940s, primarily as a spark arresting floor. Although the newly invented floor material reduced static electricity, the real focus was on preventing sparking in hospital operating rooms.

Equally important, in the 1950's and even into the 1960's, many buildings were not properly grounded. To provide protection against shock hazards, we evolved our static control tile into no-wax "static dissipative" tile, branded as STATMATE $^{\text{TM}}$. This new material quickly became a standard in many facilities and is frequently used today in some high-voltage applications and/or where inadequate grounding could be a concern.

Then a new challenge emerged. As high-tech electronics manufacturing became common, smaller and faster systems were more susceptible to damage caused by static electricity—and thus required much greater protection. For the first time, static levels imperceptible to humans could actually cause significant problems for sensitive electronics. The hallmark "shock" we traditionally felt was far and above the levels that would damage and disrupt electronics manufacturing.

Continuing its mission as an industry leader, VPI addressed this issue by inventing no-wax conductive tiles, branded as CONDUCTILE®. With up to 20 times greater protection than all other waxed static dissipative tile, impregnated tiles or poured static dissipative options, CONDUCTILE® set the standard in the industry, and continues to do so today.

So which one to choose? Static dissipative tiles are recommended where electronic *equipment* is operated—for example, in control rooms or computer server rooms. Alternatively, conductive flooring is recommended for areas where electronic *components* (such as circuit boards) are either serviced or manufactured.

While there are some limited exceptions, ESD flooring experts increasingly support the viewpoint that conductive flooring can and should be used everywhere.

In today's world, highly sensitive components need more protection, electronic equipment is much better insulated and grounded than it was in the past, and a flooring investment should be preserved well into the future. Therefore, CONDUCTILE® is the optimal solution in most applications.

Properties and Specs

For more information visit www.vpiflooring.com

Static Control Flooring Performance Properties

	1					
	CONDUCTILE®	STATMATE™				
	ELECTRICAL/ELECTROSTATIC PROPERTIES					
ESD STM 7.1: Resistance of Flooring Materials	Conforms					
ASTM F-150: Electrical Resistance	Point to Point & Point to Ground 25,000 – 1,000,000 Ohms	to Ground 1,000,000 – - 1,000,000 100,000,000				
AATCC-134: Electrostatic Propensity	< 12 Volts	< 30 Volts				
FTMS 101C: Static Decay, Method 4046 at 15% RH	5,000 – 0 Volts in < 0.01 seconds	5,000 – 0 Volts in < 0.20 seconds				
OTHER P	ROPERTIES					
ASTM F-1700: Solid Vinyl Floor Covering Materials	Conforms					
ANSI/UL 779: Electrically Conductive Floor Coverings	Meets UL Standard					
NFPA 101: Life Safety Code	Pass	es				
ASTM E-648: Critical Radiant Flux CRF (W/cm2)	> 1.0 W / cm ²					
ASTM E-662: Smoke Density	≤ 450					
ASTM E-84: Fire Resistance (Steiner Tunnel)	< 75 (Class I)					
ASTM F-970: Static Load	< 0.001" RI @ 250 psi (1.125" dia. ft.) 2,500 psi @ 0.005" RI (0.5" dia. ft.)					
NFPA 99: Standard for Health Care Facilities	Passes					
ASTM F-925: Chemical Resistance	Excellent (Acids, Alkalis, Household Chemicals)					
CONSTRUCTION						
Composition	Homogeneous solid vinyl tile that has encapsulated conductive elements of the carbon family distributed throughout the structure.					
Gauge	⅓" (3mm)					
Size	12" x 12", 24" x 24", 36" x 36" Custom sizes, pre-grooved available					
INSTALLATION						
Adhesive* & Spread Rate	VPI 150 Conductive Epoxy Adhesive covers approx. 135 sq. ft/gallon					
Trowel Size*	1/16"x 1/16" Square Notch with 1/16" Flats OR 1/16" Half Circular Notch with 1/32" Flats					
Adhesive* & Spread Rate	VPI 160 Conductive Acrylic Adhesive covers approximately 135 square					
Trowel Size*	feet/gallon 1/8" V-Notch with 1/16" Flats					
Grounding Material	One 2″x 24″ copper strip installed every 2,000–2,500 sq. ft.					
(Supplied with order)	every 2,000–2	2,500 Sq. 1t.				
	every 2,000–2 No W					
(Supplied with order) Maintenance WAR						
(Supplied with order) Maintenance	No W	/ax				

^{*} Adhesive and trowel size depends on sub floor. Please refer to VPI's Installation and Maintenance Instructions for proper trowel size selection.

Static Control Flooring Chemical Resistance Properties per ASTM F925 Methodology

Chemical	1 Minute	24 Hour	Chemical	1 Minute	24 Hour
Acetic Acid Conc.	0	SA2	Hydrogen Peroxide 30%	0	SD1
Acetone	SA1	SA3	Hydrogen Chloride	0	SA1
Household Ammonia	0	0	lodine	CC1	CC3
Ammonium Hydroxide 20%	0	0	Isopropyl Alcohol	0	SD3
Amyl Acetate	0	SA3	Kerosene	0	SA1
Acetonitrile	SD1	SA3	Methyl Alcohol	0	0
Benzene	0	SA2	Methyl Ether Ketone	SA1	SA3
Betadine*	0	CC3	Methylene Chloride	SA3	SA3
Butyl Alcohol	0	SA2	Methyl -2-pyrrolidone	SA1	SA3
Butyl Methyl Ether	0	SA1	Mineral Oil	0	0
Buffer, phenol red	CC2	CC3	Nitric Acid 5%	0	SA2
Carbon Tetrachloride	0	SA1	Nitric Acid Conc.	0	SD3
Chloroform	0	SA2	Olive Oil	0	0
Creosote	CC2	CC3	Perchloroethylene	SD3	SA3
Cresol	0	SA3	Phenol	0	SA2
Dichlormethane	0	SA1	Silver Nitrate 5%	0	CC3
Dimethyl Sulfoxide	SA3	SA3	Sodium Hydroxide 5%	0	0
Dimethyl Formamide	SA1	SA3	Sodium Hydroxide 50%	0	0
Ether	SD1	SD3	Sodium Metasilicate	0	0
Ethyl Acetate	0	SA3	Sulfuric Acid 5%	0	0
Ethyl Alcohol	0	0	Sulfuric Acid 77%	0	CC2
Ethyl Ether	0	SA1	Sulfuric Acid Conc.	0	CC2
Forane - 113C	SD3	SA2	Tetrahydrofuran	SA3	SA3
Forane - 113E	SD2	SA2	Turpentine	0	CC2
Forane - MES	SD2	SA2	Thimerosal	0	CC3
Formaldehyde 40%	0	0	Toluene	SD3	SA3
Freon	0	0	Tribasic Sodium Phosphite	0	0
Unleaded Gasoline	0	0	Trichloroethane	SA3	SA3
Hexane	SD1	SA1	Trichloroethylene	SA1	SA2
Heptane	SD1	SA1	Triethylamine	0	CC2
Hydrochloric Acid 5%	0	SA2	Trifluoroacetic Acid	0	SA2
Hydrochloric Acid 36%	0	SA3	Vinegar	0	0
Hydrochloric Acid Conc.	0	SD1	Xylene	0	SA2
Hydrofluoric Acid Conc.	0	0			

Categories:

SD = Surface Dulling - loss of gloss

CC = Color Change discoloration, bleaching, staining, etc.

SA = Surface Attack - softening, warping, blistering, etc.

Ratings

0 = No change

1 = slight change

2 = moderate change

3 = severe change

^{**} VPI's Exclusive Warranty is valid only when tile is installed with VPI #150 Conductive Epoxy or VPI #160 Conductive Acrylic Adhesive.

^{*} New and longer term Betadine stains can be removed from VPI floors by using abrasive buffing pads during the cleaning process. Please see the VPI web site for details.

Static Control Flooring Specifications

GENERAL

REFERENCES

- A. ASTM F-1700: Solid Vinyl Floor Tile
- B. ASTM F-150-06: Electrical Properties
- C. ESD STM 7.1-2001 Electrical Properties
- D. ANSI/ASTM FISCO: Electrical Properties of Static Control Flooring
- E. ANSI/UL 779: Electrically Conductive Flooring
- F. NFPA 99: Standard for Health Care Facilities
- G. NFPA 101: Life Safety Code
- H. ASTM E-662: Smoke Density
- I. ASTM E-648 / NFPA 253: Fire Resistance
- J. ASTM E-84: Fire Resistance (Steiner Tunnel)

- K. ASTM D-3389: Abrasion Resistance
- I ASTM D-2240: Hardness
- M. ASTM D-2047: Static Coefficient of Friction
- N. ASTM F-970: Static Load
- O. ASTM D-297: Density
- P. ASTM D-412: Tensile
- Q. ASTM D-412: Elongation
- R. ASTM D-624: Tear Die
- S. ASTM F-925: Chemical Resistance
- T. ASTM F-1515: Light Aging
- U. ASTM F-1514: Heat Aging

WARRANTY

- A. Provide manufacturer's warranty under provisions of Section [01700l.] [01740.]
- B. Warranty: Include a 5-year warranty that products are free from defects in materials and workmanship. Include lifetime warranty for electrical resistance.

PRODUCTS

ACCEPTABLE MANUFACTURERS

A. VPI Corporation, 3123 South 9th Street, Sheboygan, WI 53081

FLOOR COVERING MATERIALS

- A. Conductive Resilient Floor Tile: Electrical Resistance; 25,000 1,000,000 ohms; VPI Conductile®: 12"x 12", 24"x 24" & 36"x 36" square edge; 24"x 24" & 36"x 36" pre-grooved; available in 1/8" (3mm) thickness, color selected.
- B. Static Dissipative Resilient Floor Tile: Electrical Resistance; 1,000,000 100,000,000 ohms; VPI Statmate": 12"x 12", 24" x 24" & 36"x 36" square edge; 24" x 24" & 36"x 36" pre-grooved; available in 1/8" (3mm) thickness, color selected.

MANUFACTURING TOLERANCES

- A. Micro-Squared™ 12"x12" tile to plus or minus 0.002" inch; cut vertical edges perpendicular to tile surface.
- B. Precision control gauge to assure consistent surface with no high edges.

ADHESIVES

- A. Flooring Adhesives: VPI #150 Conductive Epoxy or VPI #160 Conductive Acrylic Adhesive as required for specific use.
- B. Use trowel and roller specified in the Installation and Maintenance Instructions as required per specific use.

EXECUTION

EXAMINATION

- A. Verify that stranded ground wire is in place at floor-wall juncture, and is properly connected to ground OR a steel column in area is suitable for grounding. CONSULT WITH MANUFACTURER FLOOR PREPARATION GUIDE FOR PRECAUTIONS WHEN SUBSTRATE IS LIGHTWEIGHT AGGREGATE CONCRETE, MAGNESITE FLOORING, OR FOR BELOW-GRADE CONDITIONS.
- B. Verify that concrete sub floors on- or below-grade are installed over a suitable moisture retardant membrane.
- C. Ensure concrete floors are dry and exhibit alkalinity levels between 5 & 9 pH with adequate carbonization and no dusting.
 - Maximum moisture-emission: 5 lbs./1,000 sq. ft./24 hours.
 - MOISTURE TESTS ARE RECOMMENDED.
- D. Ensure floor surfaces are smooth and flat with maximum variation of 1/8 inch in 10 feet.
- E. Ensure floor surfaces are clean and free from dust, paint, oil, grease, curing agents, parting compounds, surface hardeners, sealers, solvents, old adhesives and other extraneous substances.
- F. Beginning of installation means acceptance of surface and conditions.

INSTALLATION

A. Install flooring in accordance with manufacturer's printed instructions.

GROUNDING

- A. Connect copper grounding strip provided by VPI to a stranded ground wire, cut off excess and recess into the wall.

 OR
- B. Ground to a column or beam by drilling and tapping the column and affixing the grounding strip to the column in accordance with the manufacturer's instructions.
- C. Lay the balance of the grounding strip into the adhesive covering it with additional adhesive. Install the flooring over the grounding strip.

PROTECTION

A. Prohibit traffic on finished floor for 48 hours after installation.

CLEANING

- A. Remove excess adhesive from floor, base, and wall surfaces without damage, while adhesive is still wet.
- B. Clean floor and base surfaces in accordance with manufacturer's instructions.

STATIC CONTROL SYSTEM

- A. Precisely distributed conductive elements provide through-tile conductivity.
- B. Conductive adhesive links elements and provides tile-to-tile conductivity.
- C. The tile and adhesive create a pathway of moderate electrical conductivity to ground.

FIELD QUALITY CONTROL

A. Test completed instructions by representative in presence of Architect and Owner; in accordance with the test procedures of ESD STM 7.1, NFPA 99 or ASTM F-150.

LEED CREDITS

VPITile contributes towards:

IEQ Credit 4.1 - Low-emitting Materials: VPI #150 & #160 adhesives - 0 VOC

IEQ Credit 4.3 - Low-emitting Materials

MR Credits 4.1, 4.2: Recycled Content: 10.4% pre-consumer recycled content

MR Credits 5.1, 5.2: Regional Materials: Manufactured in Sheboygan, WI

For more information visit us at www.vpiflooring.com.



Surfacing Everywhere

Healthcare | Electronics | Education | General Purpose

Static Control Flooring Wall Base Rubber Flooring Accessories

Complete product information including: architect's material specifications, installation instructions and maintenance, recommended adhesives, code and regulation compliance, warranty information and more is available at **www.vpiflooring.com**.

VPI Product samples are available upon request:

Phone: 800-874-4240 Fax: 920-451-5894 E-mail: floor@vpicorp.com Visit: www.vpiflooring.com



For more information visit us at www.vpiflooring.com Contact us at 800-874-4240 or email floor@vpicorp.com

