

3M™ Static Control Vinyl Floor Tile 8400 Series

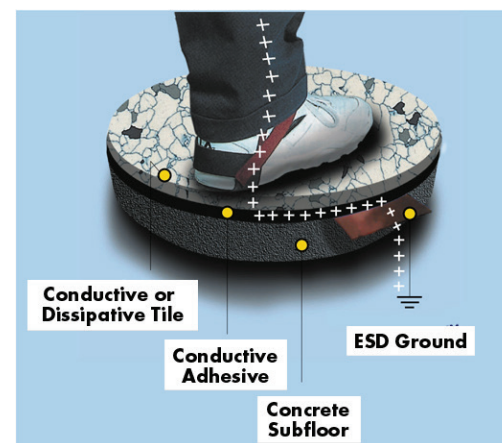
The need for static protection to drain electrostatic charges from personnel and materials is well accepted in many industries. Whether safeguarding sensitive electronic components during manufacture or service or helping control charge in a computer room or munitions factory, a key element of an ESD (electrostatic discharge) prevention program is the use of a properly designed flooring system.

Description

Static Control Vinyl Floor Tile 8400 Series is a long-term solution for helping control ESD. This solid vinyl tile is durable and attractive and can easily be installed by competent flooring contractors. The flexible, resilient tiles are made with only 100% pure vinyl and contain a minimum amount of filler and none of the regrind that can make tile brittle. Both the “conductive” and “static-dissipative” versions are available in a selection of bright, vivid colors. A proprietary manufacturing process completely seals in the conductive carbon medium, resulting in a unique tile that can be easily cleaned and shined to a gloss while maintaining its electrical properties – without the use of an ESD wax or polish.

Key Features

- Lifetime warranty on electrical performance
- 10-year limited warranty on materials
- Long-term ESD protection
- Excellent wear resistance and durability
- Easy, low-cost maintenance
- Made with 100% pure homogeneous vinyl; no regrind
- Micro-edged for squareness for ease of installation
- Available in either “conductive” or “static-dissipative” resistance range
- Available in 24.25” size for raised access floors, plus 12” and 24” sizes.
- Available in a variety of colors
- May be seamwelded or self-coved



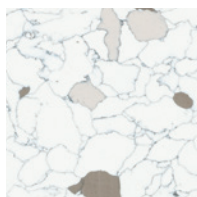
3M™ Static Control Vinyl Floor Tile 8400 Series

Available Floor Tile Colors

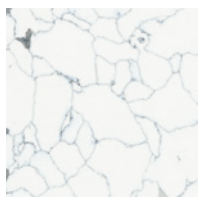
Static-Dissipative (S.D.): Series 8411 through 8427

Conductive (Cond.): Series 8431 through 8447

Brown
8411 (S.D.) or 8431 (Cond.)



White
8412 (S.D.) or 8432 (Cond.)



Gray
8413 (S.D.) or 8433 (Cond.)



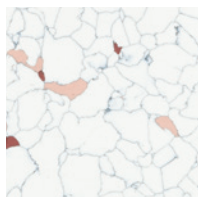
Blue
8414 (S.D.) or 8434 (Cond.)



Green
8415 (S.D.) or 8435 (Cond.)



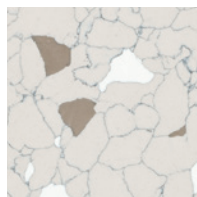
Maroon
8416 (S.D.) or 8436 (Cond.)



Black
8417 (S.D.) or 8437 (Cond.)



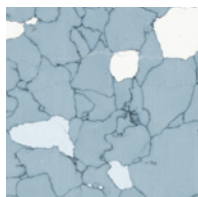
Reverse Brown
8421 (S.D.) or 8441 (Cond.)



Reverse Gray
8423 (S.D.) or 8443 (Cond.)



Reverse Blue
8424 (S.D.) or 8444 (Cond.)



Reverse Green
8425 (S.D.) or 8445 (Cond.)



Reverse Black
8427 (S.D.) or 8447 (Cond.)



Specifications

Mechanical Properties Typical

Static-Dissipative Floor Tile (Series 8411-8427)

Conductive Floor Tile (Series 8431-8447)

Flammability

Flame Spread Index
ASTM E84

Meets Class 1 requirements

Critical Radiant Flux
(ASTM E648)

> 1.1w/cm²

Physical Specifications

Meets ASTM F1700-13A

Abrasion Resistance
(ASTM D 3389)
Taber H22 wheel

Pass

Electrical Properties

Typical Static Dissipative Tile (8413-8427)	Typical Conductive Tile (8431-8447)
Electrical Resistance ANSI/ESD STM7.1 and ANSI/ESD STM97.1	1 x 10 ⁶ to 1 x 10 ⁹ ohms
Static Generation (Walking Voltage) (with 3M™ Shoe Grounder Assembly 2051 at 12% RH (+/-3% RH at 73 degrees F +/-2 degrees)	< 50 volts Testing done per ANSI/ESD STM97.2
(With ESD Control Rated Shoes <35 megohms per ANSI/ESD STM9.1 and ANSI/ESD STM97.1)	< 25 volts Testing done per ANSI/ESD STM97.2

Electrical Resistance
ANSI/ESD STM7.1 and ANSI/ESD
STM97.1

1 x 10⁶ to 1 x 10⁹ ohms

2.5 x 10⁴ to 1 x 10⁶ ohms

Static Generation (Walking Voltage)

< 50 volts
Testing done per ANSI/ESD STM97.2

< 25 volts
Testing done per ANSI/ESD STM97.2

(with 3M™ Shoe Grounder Assembly
2051 at 12% RH (+/-3% RH at 73
degrees F +/-2 degrees)

(With ESD Control Rated Shoes <35
megohms per ANSI/ESD STM9.1 and
ANSI/ESD STM97.1)

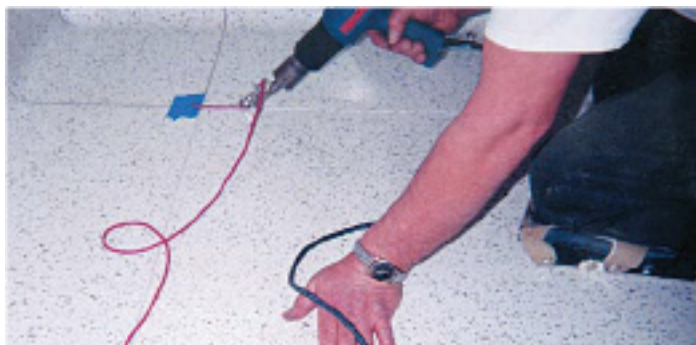
Sizes

0.125 x 12 x 12 in. (3.2 x 305 x 305 mm)
0.125 x 24.25 x 24.25 in. (3.2 x 615 x 615 mm)
– for raised access floor panels
0.125 x 24 x 24 in. (3.2 x 610 x 610 mm)
– for seamwelded installations

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3M™ Static Control Vinyl Floor Tile 8400 Series is available in the special 24.5" x 24.5" size used for raised access floor panels.



3M™ Static Control Vinyl Floor Tile 8400 Series can be self-coved and seamwelded during installation.

3M is a trademark of 3M Company.



Electronics Materials Solutions Division Static Control Products

926 JR Industrial Drive
Sanford, NC 27332-9733
Toll-Free: 866-722-3736
International: 919-718-0000
Email: 3mstaticinfo@mmm.com
www.3Mstatic.com

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Important Notice

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Limited Warranty

All statements, technical information, and recommendations related to 3M's products are based Subject to the provisions of this Limited Warranty, 3M expressly warrants that Static Control Vinyl Floor Tile Series 8400 will be free from defects in material and manufacture for a period of ten (10) years from the date of purchase. 3M warrants that the 3M Product will perform in accordance with test method ESD S7.1 for the lifetime of the Product. This applies to both "Static Dissipative" Tile (surface-to-ground resistance of 1×10^6 to 1×10^9 ohms) and "Conductive" Tile (surface-to-ground resistance of 2.5×10^4 to 1×10^6 ohms) subject to the Warranty Exclusions listed below. Must be installed using 3M approved conductive adhesive.

Exclusive Remedy; Limited Liability; Claims Procedure

Any Claims for surface defects or variations in color or pattern must be communicated to 3M in writing prior to the actual installation. If this product is proved defective within the warranty period stated above, the exclusive remedy will be, at 3M's option, to repair or replace the 3M Product or to refund the purchase price of the 3M Product. **IN NO EVENT WILL 3M OR ANY SELLER BE RESPONSIBLE OR LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL LOSSES OR DAMAGES UNDER ANY LEGAL THEORY INCLUDING BUT NOT LIMITED TO CONTRACT, NEGLIGENCE OR STRICT LIABILITY. 3M MUST BE NOTIFIED IN WRITING OF ANY DEFECT AND SUCH DEFECTIVE PRODUCT MUST BE RETURNED TO 3M ALONG WITH A PROOF OF PURCHASE.** 3M will not accept the return of any product without the prior approval of 3M. If the product is already installed, then 3M must examine and verify the defect.

Warranty Exclusions

(1) There is no warranty for (i) workmanship of installation and (ii) dissatisfaction, problems, or damage due to installation or maintenance, other than as recommended by 3M. (2) Excessive moisture in or below the concrete slab can result in adhesion problems and/or surface defects (blistering or cracking) in any flooring material. This warranty does not include delamination or surface defects due to the presence of alkali or other contaminants in the subfloor or due to hydrostatic pressure or moisture vapor transmission rates greater than 3 pounds per 1000 square feet per 24 hours (ASTM F-1869). (3) There is no warranty for any reduction in the gloss of the tile from use. (4) There is no warranty for damage due to accidents, gouges, scuffs, scratches or indentation. (5) If Buyer's purchase includes goods from another manufacturer, only the warranty given by that particular manufacturer will apply to those specific goods. (6) **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly install, maintain, clean or repair the 3M Product. (7) 3M Flooring Products that are sold as "seconds" are sold strictly on an "as is" basis without any warranty. NOTE: No person or representative is allowed to give any other or any additional warranty other than what is stated above unless approved by an officer of 3M.