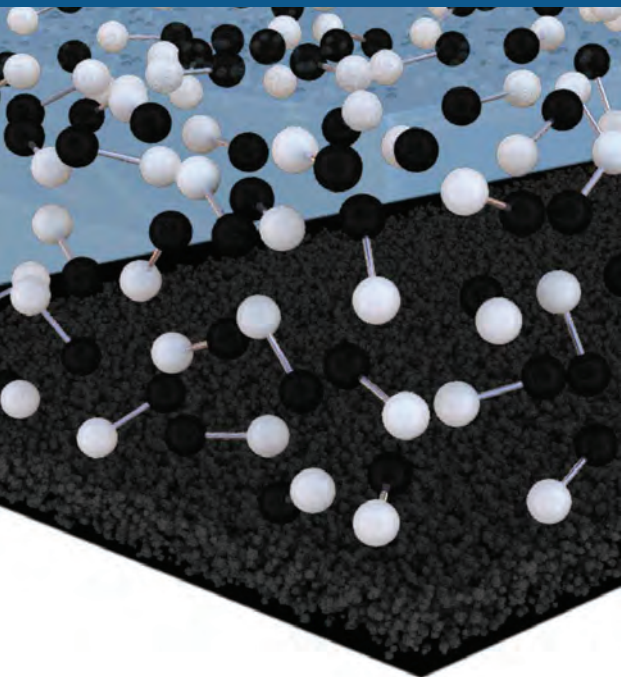
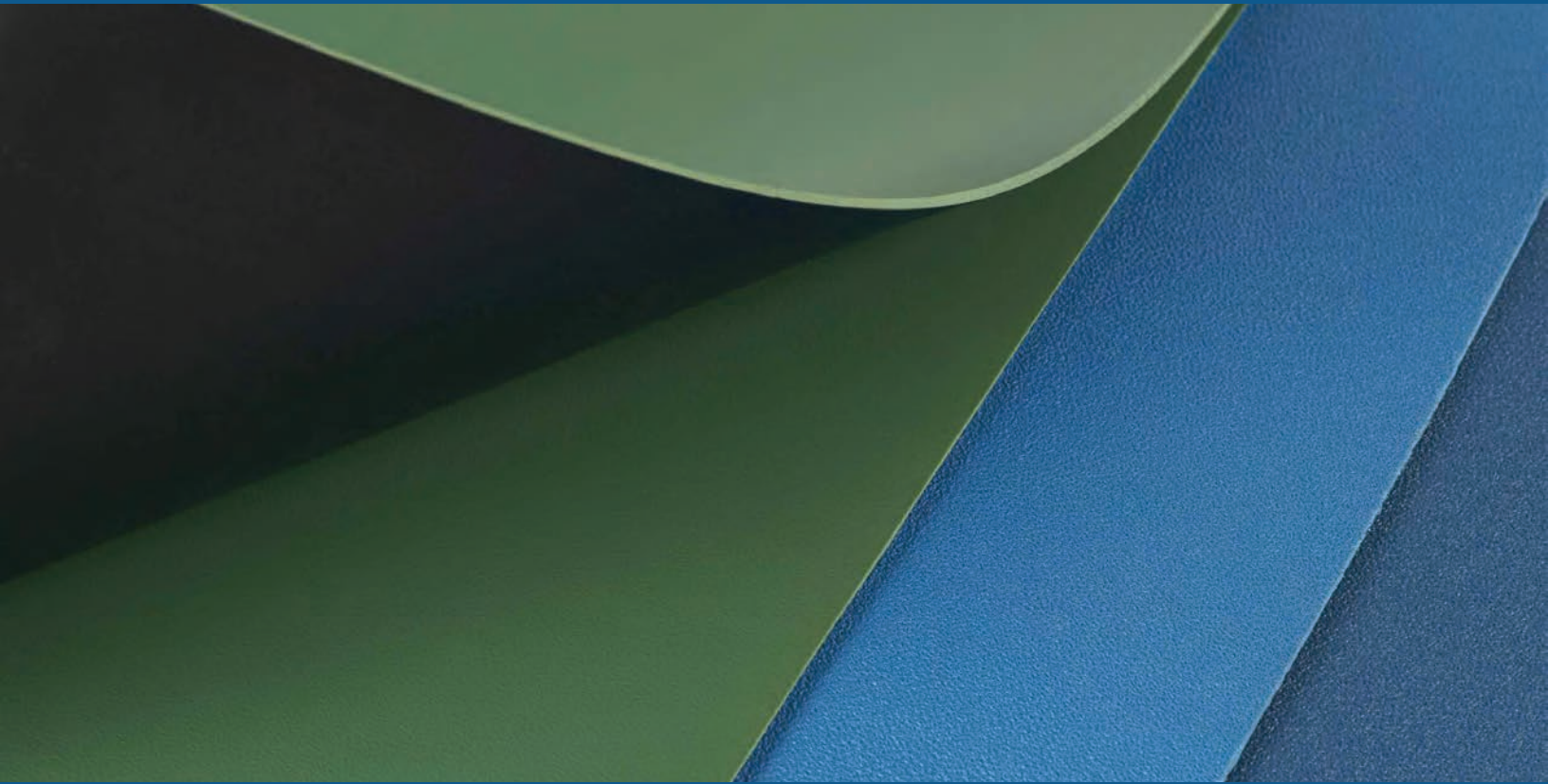


## Tuff Trac® ESD & Conductive Matting

Stipple, Diamond, and Smooth Patterns

**BILTRITE®**  
THERMOPLASTICS



Tuff Trac® Dual layer design bonds migratory anti-static ESD to a Conductive Polymer

**Tuff Trac® ESD and conductive matting provide a range of product options depending on the degree of protection required.**

RM Biltrite™'s Tuff Trac® ESD and conductive flooring and workstation products offer multiple solutions for any environment where static charge creates a risk for product damage or personnel safety.

Tuff Trac® ESD Dual Layer with a proprietary blend of polymers, migratory antistatic components and carbon black is designed to perform at an optimal rating of  $10^4$  -  $10^8$  with controlled dissipation and is the preferred product for many audited environments.

Our ability to make performance ingredients homogenous, not only increases longevity, but makes Tuff Trac® electrical matting impervious to wear damage or disruption from moved lab furniture or other abuse.





## Tuff Trac® Static Safe Work Surfaces

### Tuff Trac® ESD Single Layer

A proprietary blend of polymers and migratory anti-static, homogeneously-dispersed and continuously migrating to the surface. It has hydrophylic or H<sub>2</sub>O-attracting properties so that there is a micro-thin layer of water on the surface, assisting the flow of static charge. The polymer is blended to control, that is, slow down the speed of dissipation. Tuff Trac® single layer ESD mats deliver a resistance of  $10^8$ - $10^9$ . (This product is not suitable for conditions where monitoring is required.)

Stipple embossing face with smooth back.

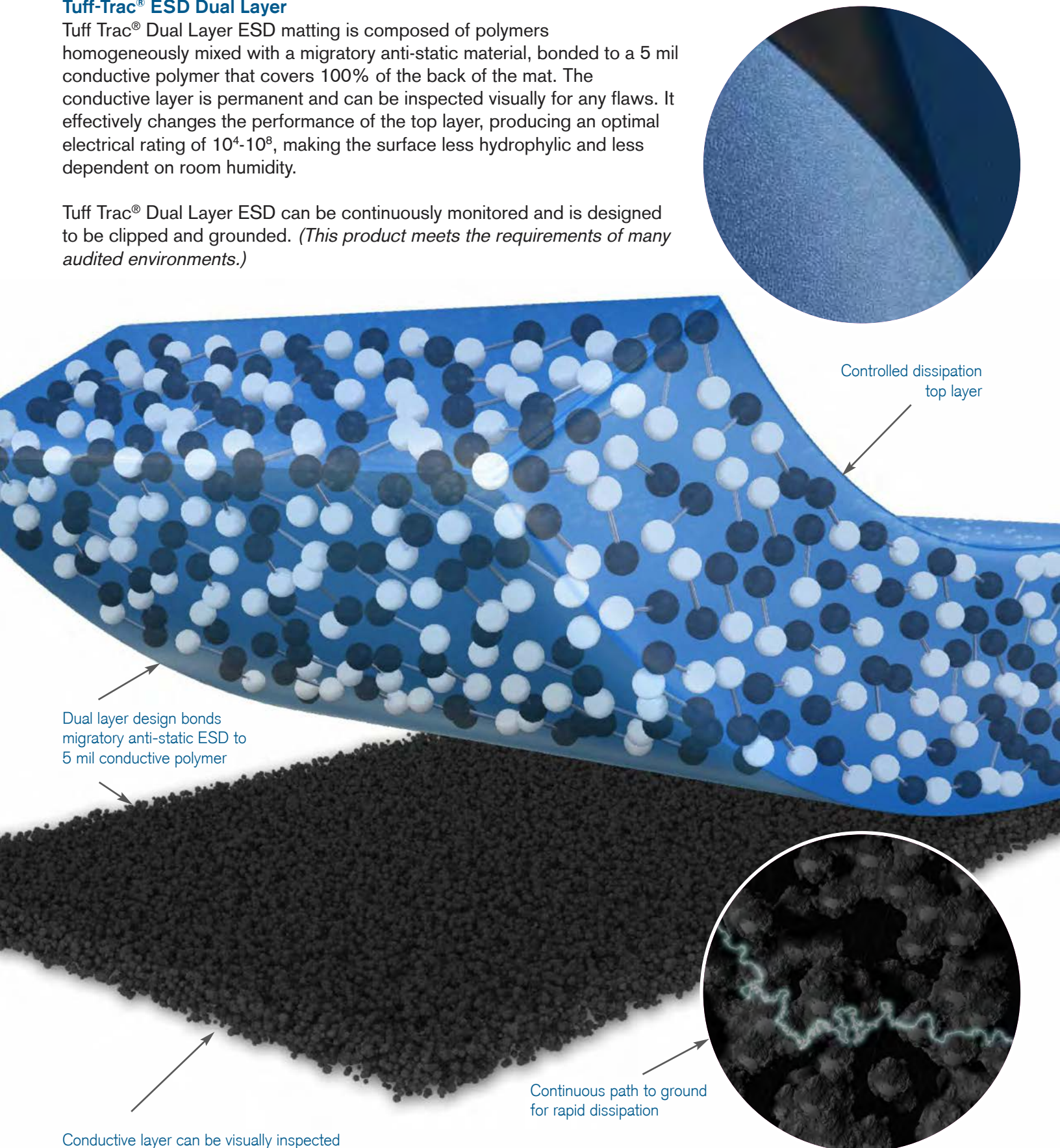


# Uncompromised Protection from Static Events

## Tuff-Trac® ESD Dual Layer

Tuff Trac® Dual Layer ESD matting is composed of polymers homogeneously mixed with a migratory anti-static material, bonded to a 5 mil conductive polymer that covers 100% of the back of the mat. The conductive layer is permanent and can be inspected visually for any flaws. It effectively changes the performance of the top layer, producing an optimal electrical rating of  $10^4$ - $10^8$ , making the surface less hydrophobic and less dependent on room humidity.

Tuff Trac® Dual Layer ESD can be continuously monitored and is designed to be clipped and grounded. *(This product meets the requirements of many audited environments.)*



# Technical Data

Tuff Trac® ESD and Conductive products are available in various non-slip surfaces and colors. Also available with standard yellow safety edge on homogenous conductive floor products



## Product Characteristics

## Test Method

### Application

Embossing

Face  
Back

Thickness

### Polymer

Type

Standard color

Specialty color

Safety Border

Physical Properties

Tensile

Elongation

Surface wear resistance

Dimensional stability/Layflat

### Electrical Properties

Resistance to top (RTT)/Face

Resistance to ground (RTG)/Face

Resistance to ground (RTG)/Face

Ozone resistance

### Health & Safety

REACH & RoHS

Static Sensitive Surfaces

Recommended use

### ESD

Stipple  
Smooth  
3/50"(.065")

### PVC

Homogenous  
polymer  
construction

Blue, Gray

Optional  
No

1000 PSI  
175%

Very Good  
Excellent

$10^8 - 10^9$

–

–  
Pass

Compliant

Table

### ESD – Dual Layer

Stipple  
Smooth  
3/50"(.065")

### PVC

**Dual Layer  
Design,**  
ESD (Face) &  
Conductive (Back)  
Blue,Green

Optional  
No

1000 PSI  
175%

Very Good  
Excellent

–  
 $10^6 - 10^8$

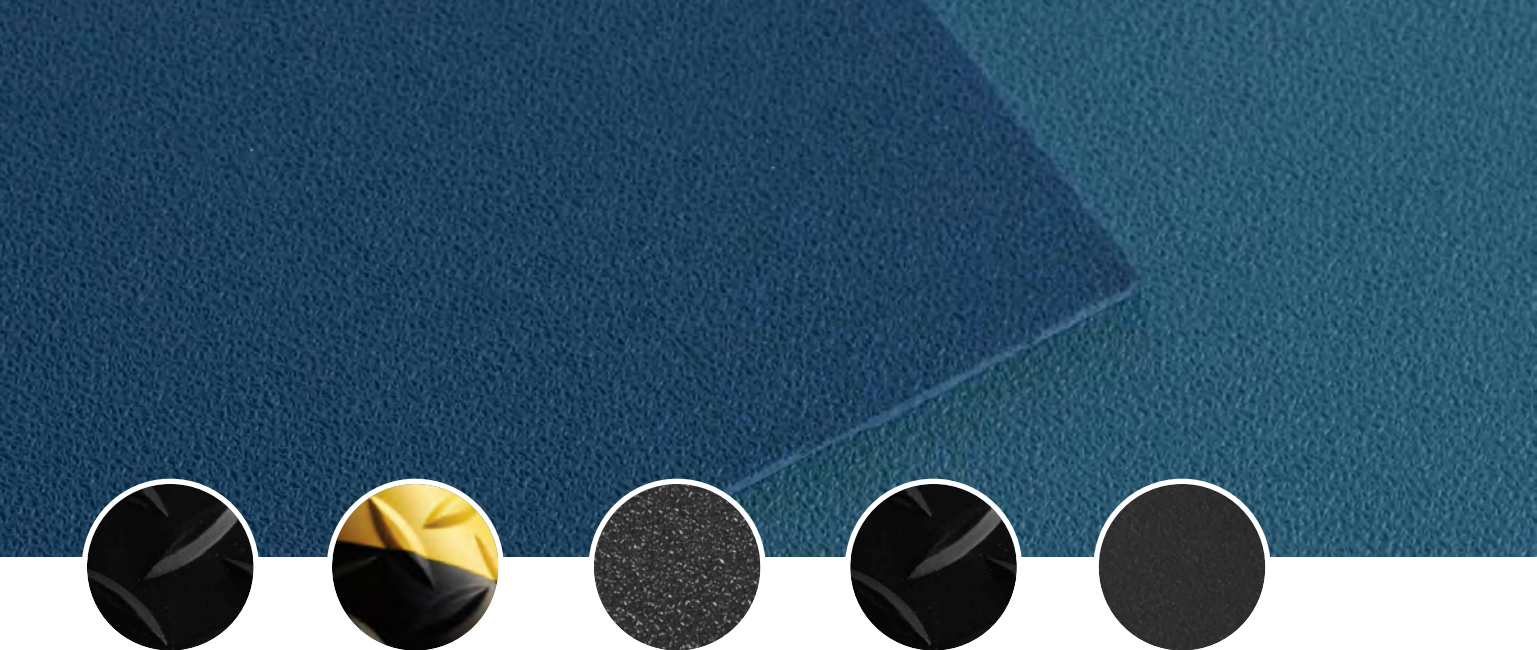
–  
Pass

Compliant

Table/Shelf







**Electrical Service Range**

ESD – Dual Layer	Conductive – Homogenous	Conductive – Homogenous	Conductive	Conductive
Diamond Patterned 5/32"(.156")	Diamond Patterned 5/32"(.156")	Stipple Smooth 2/25"(.080"), 1/8" (.125")	Diamond Patterned 5/32"(.156")	Smooth Smooth 2/25"(.080") 1/8"(.125")*
PVC	TPO*	TPO*	PVC	PVC
Dual Layer Design, ESD (Face) & Conductive (Back)	Homogenous polymer construction	Homogenous polymer construction	Conductive top side	Conductive top side
Black Optional Optional	Black No Standard	Black No Optional	Black No No	Black No No
1000 PSI 150%	1000 PSI 100%	900 PSI 100%	800 PSI 150%	800 PSI 150%
Excellent Excellent	Excellent Good	Excellent Good	Good Excellent	Good Excellent
– –	– –	– –	– –	– –
10 <sup>6</sup> – 10 <sup>8</sup> Pass	10 <sup>4</sup> – 10 <sup>6</sup> Pass	10 <sup>4</sup> – 10 <sup>6</sup> Pass	10 <sup>4</sup> – 10 <sup>6</sup> Pass	10 <sup>4</sup> – 10 <sup>6</sup> Pass
Compliant	Compliant	Compliant	Compliant	Compliant
Floor	Floor	Floor/Shelf	Floor	Floor/Shelf

\*Also available as Homogenous PVC





# Static Dissipation in Nanoseconds

## Tuff Trac® Conductive Matting

Recommended for floor and work surface anti-static protection where stronger electrical charges might be encountered and decay/dissipation can be measured in nanoseconds. These conductive mattings are tested using the ANSI/ESD S7.1–2005 protocols and fall in the optimal range  $10^4$ – $10^6$ .

**Tuff Trac® Conductive TPO** is a non-vinyl conductive with a homogeneous distribution of carbon black and proprietary polymers, to provide a continuous and permanent path-to-ground that cannot be worn away. This is a supple product that provides anti-fatigue comfort for workers, combined with electrical floor protection. *(Also available in PVC)*

**Tuff Trac® Conductive PVC** matting is RM Biltrite™'s most economical conductive matting solution. It incorporates a highly conductive cap film bonded to a non-conductive base. Its resistance is  $10^5$ – $10^6$  and requires grounding clips for proper performance. It is available in a smooth or diamond plate surface. It is not recommended where chairs, carts or other objects that would abrade the surface are used.



Expandable Floor Systems



Worker Fatigue Protection



Positive Traffic Control

Made in the USA by RM Biltrite™ LLC, a leading US manufacturer of engineered thermoplastic products including: building materials, specialty flooring and matting, noise attenuation, gasketing and other products with complex technical requirements.

**For more information and samples, contact your local distributor or a RM Biltrite™ representative at (800) 877-8775.**



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