Description:
Statfree Z2™ material is a highly effective three-layer material. Its durable vinyl top layer makes it ideally suited for use as an ESD protective bench mat. Its highly conductive middle layer provides a faster discharge path to ground. The cushioned dissipative bottom layer provides excellent protection against physical damage, and makes it easier to pick up small parts. The heat fused vinyl composite resists delamination, and is compatible for use with continuous monitors. Statfree Z2™ meets the ESD worksurface requirements of ANSI/ESD S20.20 and recommendation of ESD S4.1.

See reverse side for available mat and roll sizes.

Matting materials have a tendency to shrink slightly when first unrolled. In applications where length is critical, allow the material to relax for at least 4 hours before cutting to size. Always trim with a sharp knife or razor blade.

Electrical Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charge Decay</td>
<td>FTMS 101C, M 4046</td>
<td>&lt;0.01sec.</td>
</tr>
<tr>
<td>RTT Resistance</td>
<td>ESD S4.1</td>
<td>10E6 - 10E8 Ohms</td>
</tr>
<tr>
<td>RTG Resistance</td>
<td>ESD S4.1</td>
<td>10E6 - 10E8 Ohms</td>
</tr>
</tbody>
</table>

Electrical Properties obtained by testing to industrial standards by an independent testing laboratory @ 100 Volts and 50% relative humidity unless otherwise specified. Complete text of the test report is available upon request.

Disclaimer:
All statements, technical data, and recommendations contained herein are based upon tests we believe to be reliable. However, the accuracy or completeness thereof is not guaranteed. The proper and correct applications of products and data is the responsibility of the user. Statements or recommendations not contained herein shall have no force or effect unless embodied in a written agreement signed by authorized officers of Desco Industries, Inc.

Specifications:

- Construction: Heat fused vinyl composite
- Thickness: 0.125" (3.2mm)
- Color:* Blue, grey
- Texture:* Light Embossing
- Hardness: 45 Shore A*, per ASTM-D412
- Tensile Strength: Greater than 300 psi, per ASTM-D412
- Tear Strength: Greater than 80 lbs/inch, per ASTM-D624
- Elongation: Greater than 80%, per ASTM-D412
- Abrasion Resistance: Greater than 750 cycles, per Tabor-CS17
- Heat Resistance: -20°F to 140°F continuous
- Chemical Resistance: Resistance to degradation by inorganic acids, organic acids, reducing agents, aliphatic hydrocarbons, mineral oil, aldehydes, and amines

*Color and texture may vary between lots and mills

Grounding: This material must be properly grounded for optimum electrical performance. Ask for Tech Brief PS-2013 for mat grounding instructions.

Cleaning: For optimum electrical performance, surface must be cleaned regularly using an ESD mat cleaner. We suggest using our Reztore™ Surface & Mat Cleaner Item #16030 or Static Wipes Item #16020. Do not use cleaners with silicone. Silicone buildup will create an insulative film on the surface.

Limited Lifetime Warranty:
ESD Systems warrants for one year that Statfree® matting products will be free of defects in materials and workmanship and will guarantee dissipative/conductive mat properties for the life of the mat. Damage to matting caused by misuse of any kind, including using inappropriate cleaners is not covered by ESD Systems Limited Warranty.

RoHS Compliance Statement
None of the following materials are intentionally added in manufacturing this product: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) as outlined in the Directive 2002/95/EC Article 4.1. See Desco Industries Inc. letter on-line at ESDSystems.com.

Statfree Z2™ Material, Vinyl, Dissipative, 3-Layer, .125" (3.2mm)

ESD SYSTEMS.COM
432 NORTHBORO ROAD CENTRAL
MARLBORO, MA 01752 USA
TEL. (508) 485-7390   FAX (508) 480-0257
Visit our online library of Tech Drawings: http://www.esdsystems.com

Drawing: TD-Z2
Material Statfree Z2™

DATE
2/06
Item Number Reference For Statfree Z2™ Vinyl, Dissipative, 3-Layer

**KITS**

Mat Top Kit Item Numbers

<table>
<thead>
<tr>
<th>SIZE</th>
<th>BLUE</th>
<th>GREY</th>
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</thead>
<tbody>
<tr>
<td>24” x 36”</td>
<td>10640</td>
<td>10650</td>
</tr>
<tr>
<td>24” x 48”</td>
<td>10645</td>
<td>10655</td>
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</table>

MAT TOP KIT INCLUDES
1 Benchmat, Statfree Z2™, size as specified
1 13165, common point kit
1 12000, universal snap kit

**ROLL STOCK**

Roll Material Item Numbers

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</thead>
<tbody>
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<td>24” x 50’</td>
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<td>10670</td>
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<tr>
<td>30” x 50’</td>
<td>10690</td>
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<td>36” x 50’</td>
<td>10695</td>
<td>10696</td>
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<tr>
<td>48” x 50’</td>
<td>10675</td>
<td>10685</td>
</tr>
</tbody>
</table>

Grounding Intervals for ESD Mats
Sufficient ground cords should be used to reliably meet ANSI/ESD S20.20 Table 1 less than 1 x 10E9 ohms for worksurfaces. An industry recommendation has been that continuous runs of ESD matting should be grounded at ten-foot intervals to allow proper charge decay rates with each individual ESD mat should be grounded with ground snap located no further than five feet from either end.

Hardware is not included with rolls.

Tolerances:
Width ± .250"
Length ± .250" every 1 linear foot of running material.

Look for the Statfree® brand on ESD Systems.com ESD matting. All ESD Systems.com mat top kits are permanently marked for your protection and auditing purposes.