

DESCO INDUSTRIES INCORPORATED

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QUALIFICATION REPORT – ANSI/ESD S20.20-2021

DESCO TRUSTAT B80 VINYL DISSIPATIVE MAT

ANSI/ESD S20.20-2021	DESCO Test Results	Test Methods
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Resistance (ohms) @ 12% RH, 23°C, 48-72 hours conditioning, N=3 specimens, 100V

Resistance-to-Groundable point	< 1.0x10 ⁹	See Table 1	ANSI/ESD S4.1 – 2017
Resistance Point-to-Point	< 1.0x10 ⁹	See Table 2	ANSI/ESD S4.1 – 2017

Resistance (ohms) @ 50% RH, 23°C, 48-72 hours conditioning, N=3 specimens, 100V

Resistance-to-Groundable point	< 1.0x10 ⁹	See Table 1	ANSI/ESD S4.1 – 2017
Resistance Point-to-Point	< 1.0x10 ⁹	See Table 2	ANSI/ESD S4.1 – 2017

Testing Equipment (Calibration records and test results are located at SCS (Sanford, NC)):

- ETS Controlled Environment Chamber (Model 514)
- ETS Surface Resistance Probe (Model 850)
- Desco Surface Resistance Meter (Model 19299)

Test Data:

Table 1 - Resistance-to-Groundable point

S4.1 Test Position	RTG (ohms), at 12%RH, 23°C			RTG (ohms), at 50%RH, 23°C		
	Sample #1	Sample #2	Sample #3	Sample #1	Sample #2	Sample #3
Figure 1 – Position 1	6.28 x10 ⁶	6.36 x10 ⁶	1.15 x10 ⁷	3.06 x10 ⁶	3.78 x10 ⁶	6.63 x10 ⁶
Figure 1 – Position 2	7.10 x10 ⁶	6.86 x10 ⁶	1.46 x10 ⁷	3.21 x10 ⁶	3.60 x10 ⁶	8.78 x10 ⁶
Figure 1 – Position 3	6.19 x10 ⁶	6.91 x10 ⁶	1.24 x10 ⁷	4.58 x10 ⁶	3.94 x10 ⁶	8.03 x10 ⁶
Figure 1 – Position 4	9.09 x10 ⁶	7.45 x10 ⁶	1.12 x10 ⁷	4.05 x10 ⁶	4.25 x10 ⁶	5.74 x10 ⁶
Figure 1 – Position 5	6.49 x10 ⁶	1.01 x10 ⁷	1.14 x10 ⁷	4.43 x10 ⁶	5.01 x10 ⁶	6.72 x10 ⁶
Min. =	6.19 x10⁶	6.86 x10⁶	1.12 x10⁷	3.21 x10⁶	3.60 x10⁶	5.74 x10⁶
Mean =	7.14 x10⁶	7.73 x10⁶	1.23 x10⁷	4.03 x10⁶	4.17 x10⁶	7.22 x10⁶
Max. =	9.09 x10⁶	1.01 x10⁷	1.46 x10⁷	4.58 x10⁶	5.01 x10⁶	8.78 x10⁶

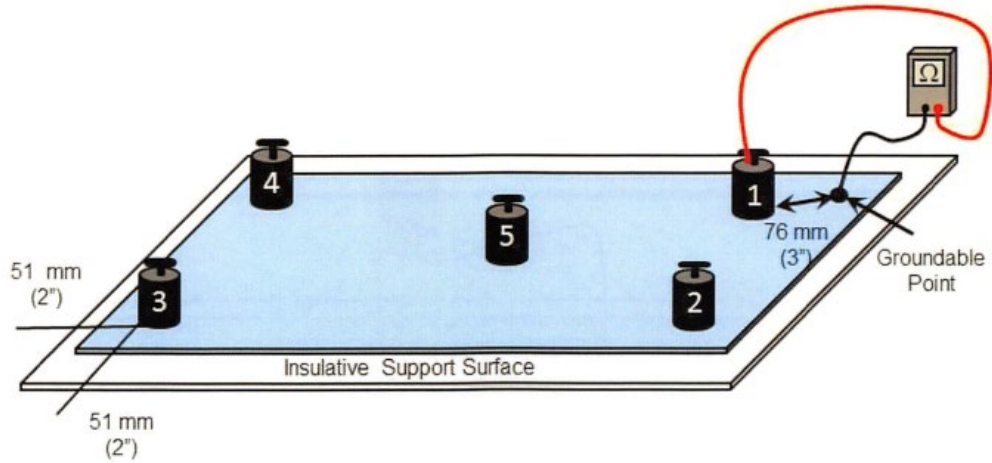
Table 2 - Resistance Point-to-Point

S4.1 Test Position	RTT (ohms), at 12%RH, 23°C			RTT (ohms), at 50%RH, 23°C		
	Sample #1	Sample #2	Sample #3	Sample #1	Sample #2	Sample #3
Figure 2 – Set up A	1.67 x10 ⁷	1.54 x10 ⁷	2.64 x10 ⁷	9.87 x10 ⁶	1.04 x10 ⁷	1.46 x10 ⁷
Figure 2 – Set up B	1.67 x10 ⁷	1.60 x10 ⁷	5.48 x10 ⁷	1.04 x10 ⁷	1.00 x10 ⁷	1.36 x10 ⁷
Figure 2 – Set up C	1.78 x10 ⁷	1.51 x10 ⁷	3.07 x10 ⁷	9.09 x10 ⁶	1.03 x10 ⁷	1.39 x10 ⁷
Figure 2 – Set up D	1.48 x10 ⁷	1.60 x10 ⁷	4.09 x10 ⁷	9.53 x10 ⁶	1.01 x10 ⁷	1.47 x10 ⁷
Min. =	1.48 x10⁷	1.51 x10⁷	2.64 x10⁷	9.09 x10⁶	1.00 x10⁷	1.36 x10⁷
Mean =	1.65 x10⁷	1.56 x10⁷	3.67 x10⁷	9.71 x10⁶	1.02 x10⁷	1.42 x10⁷
Max. =	1.78 x10⁷	1.60 x10⁷	5.48 x10⁷	1.04 x10⁷	1.04 x10⁷	1.47 x10⁷

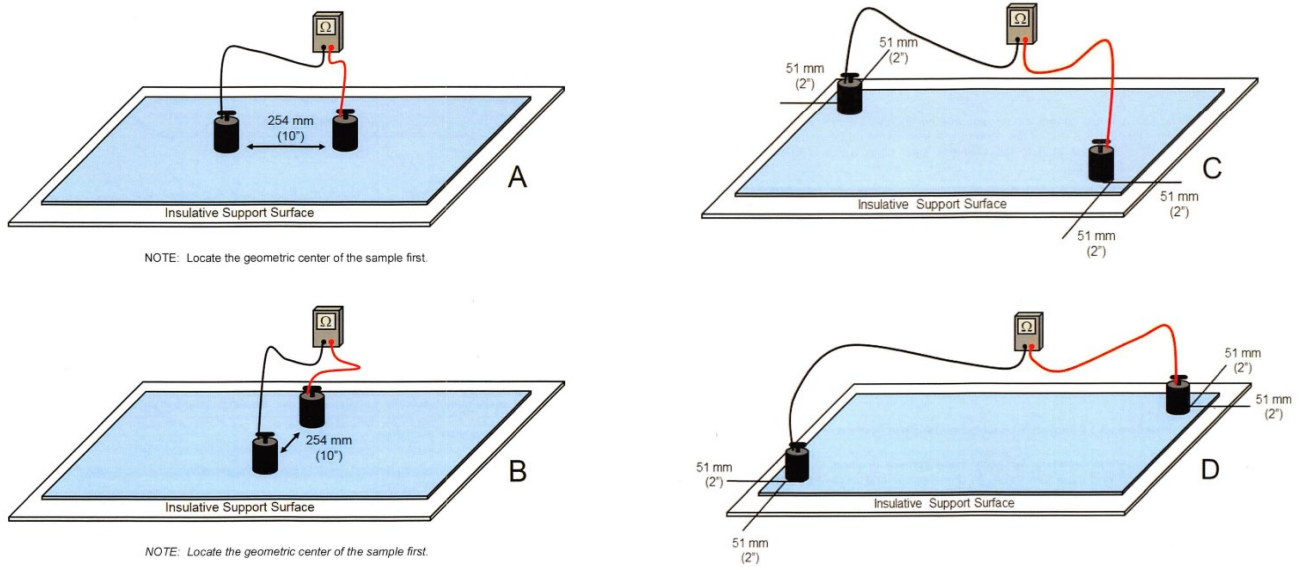
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References:



ANSI/ESD S4.1-2017 – Figure 1: Work-surface – Resistance-to-Groundable Point



ANSI/ESD S4.1-2017 – Figure 2: Work-surface – Resistance Point-to-Point