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QUALIFICATION REPORT – ANSI/ESD S20.20 DESCO STATSHIELD® FOIL MOISTURE BARRIER BAG

ANSI/ESD S20.20	DESCO Test Results	Test Methods
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Surface Resistance (ohms) @ 12% RH, 23°C, 48-72 hours conditioning, N=10 specimens, 100V

Interior (Sealing Surface)	$\geq 1.0 \times 10^4$ to $< 1.0 \times 10^{11}$	See Table 1	ANSI/ESD STM11.11
Exterior	$\geq 1.0 \times 10^4$ to $< 1.0 \times 10^{11}$	See Table 1	ANSI/ESD STM11.11

Surface Resistance (ohms) @ 50% RH, 23°C, 48-72 hours conditioning, N=6 specimens, 100V

Interior (Sealing Surface)	$\geq 1.0 \times 10^4$ to $< 1.0 \times 10^{11}$	See Table 1	ANSI/ESD STM11.11
Exterior	$\geq 1.0 \times 10^4$ to $< 1.0 \times 10^{11}$	See Table 1	ANSI/ESD STM11.11

Discharge Shielding (nJ) @ 23°C, minimum 48 hours conditioning, N=6 specimens @ 6 individual readings per specimen

@ 12% RH	< 20	See Table 1	ANSI/ESD STM11.31
@ 50% RH	< 20	See Table 1	ANSI/ESD STM11.31

Test Equipment (Calibration records and test results are located at corporate lab (Sanford, NC)):

For Test Method ANSI/ESD STM11.11:

- ETS Controlled Environment Chamber (Model 5532)
- SCS Surface Resistance Meter (Model 770761)
- SCS Concentric Ring Probe (Model 770007)

For Test Method ANSI/ESD STM11.31:

- ETS Controlled Environment Chamber (Model 5532)
- ETS Shielded Bag Test System (Model 4431T)

Table 1: Test Results:

Specimen	Surface Resistance (ohms) 48-72 hours conditioning				Discharge Shielding (nJ) min. 48 hours conditioning	
	Interior @ 23°C, 12%RH	Exterior @ 23°C, 12%RH	Interior @ 23°C, 50%RH	Exterior @ 23°C, 50%RH	@ 23°C, 12%RH (avg 6 individual)	@ 23°C, 50%RH (avg 6 individual)
1	3.40×10^9	7.24×10^9	3.35×10^8	1.09×10^9	0.55	0.51
2	3.85×10^9	4.99×10^9	3.82×10^8	5.52×10^8	0.56	0.51
3	3.64×10^9	5.73×10^9	3.47×10^8	4.38×10^8	0.55	0.53
4	5.06×10^9	5.39×10^9	3.61×10^8	5.05×10^8	0.51	0.49
5	4.32×10^9	6.99×10^9	2.92×10^8	4.38×10^8	0.57	0.50
6	3.90×10^9	5.50×10^9	3.09×10^8	3.66×10^8	0.59	0.52
7	4.24×10^9	5.24×10^9				
8	4.44×10^9	6.95×10^9				
9	4.26×10^9	6.76×10^9				
10	4.41×10^9	5.81×10^9				
Min Ind=	3.40×10^9	4.99×10^9	2.92×10^8	3.66×10^8	0.50	0.47
Max Ind=	5.06×10^9	7.24×10^9	3.82×10^8	1.09×10^9	0.60	0.52
Mean of Ind=	4.15×10^9	6.06×10^9	3.38×10^8	5.65×10^8	0.57	0.47
Std Dev Ind =	4.72×10^8	8.36×10^8	3.32×10^7	2.65×10^8	0.02	0.02