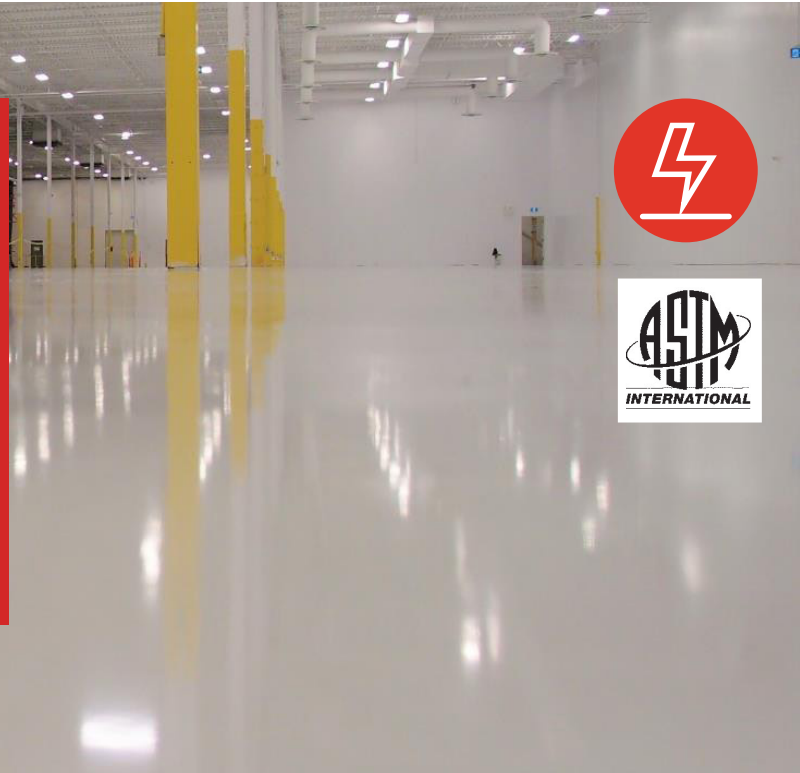




CASE STUDY & TEST REPORT

Dur-A-Static 535 SL

Customer: Electronics Manufacturer
Location: Markham, ON, CANADA
Completion Year: 2020
Application Type: Custom White ESD Flooring Systems Installed: Durex[®] Dur-A-Static 535 SL



Analysis

Project Info:

High-End Electronics Manufacturer had a specific need for a custom ESD Flooring system for their new electronics manufacturing plant.

Client Objectives:

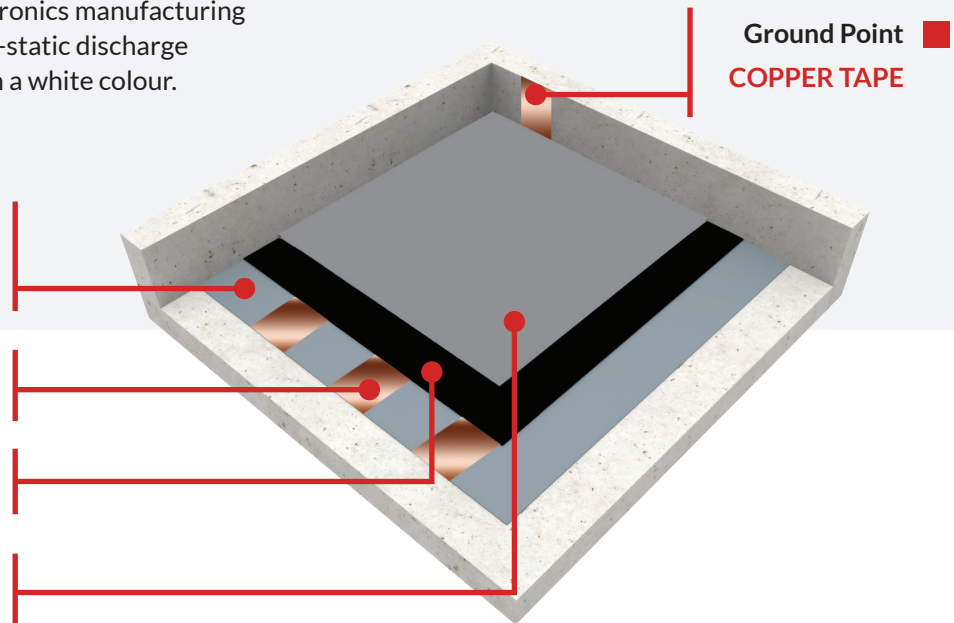
Client required a durable, high-wearing and long lasting floor for their new high-end electronics manufacturing plant. The floor had to be electric-static discharge within a specific ohm range and in a white colour.

Solution

Durex[®] Dur-A-Static 535 SL

- 3mm thick, durable ESD system
- White colour specially formulated
- OHM range adjusted to their specific need
- Clean and durable finished floor

- **Primer**
EPOTEL SL OR
EPOTEL 100 GSC
- **Conductive Material**
COPPER TAPE
- **Conductive Coat**
DUR-A-STATIC ESD 100
- **Body Coat**
DUR-A-STATIC 535 SL



Head Office - Toronto

55 Underwriters Road
 Toronto, ON M1R 3B4
T (416) 759-4474
F (416) 759-4470

Mississauga Office

6178 Netherhart Rd
 Mississauga, ON L5T 1B4
T (905) 565-9283
F (905) 565-9365

Western Canada Office

14604 124 Ave NW
 Edmonton, AB T5L 2R8
T (780) 451-6364
F (780) 453-9056

General Inquiries

T 1 877 387-2266
E info@durabond.com
W www.durabond.com

Product: Dur-A-Static 535 SL

Specifications: 2.50 x 10⁴ to 1.0 x 10⁶ ohms

Test Method: In accordance with ASTM 150 / ANSI ESD S7

Equipment: Automated Prostat PRS-812 Surface Resistance Meter Set with two 5lb, Prostat Probe (As per ASTM Specifications)

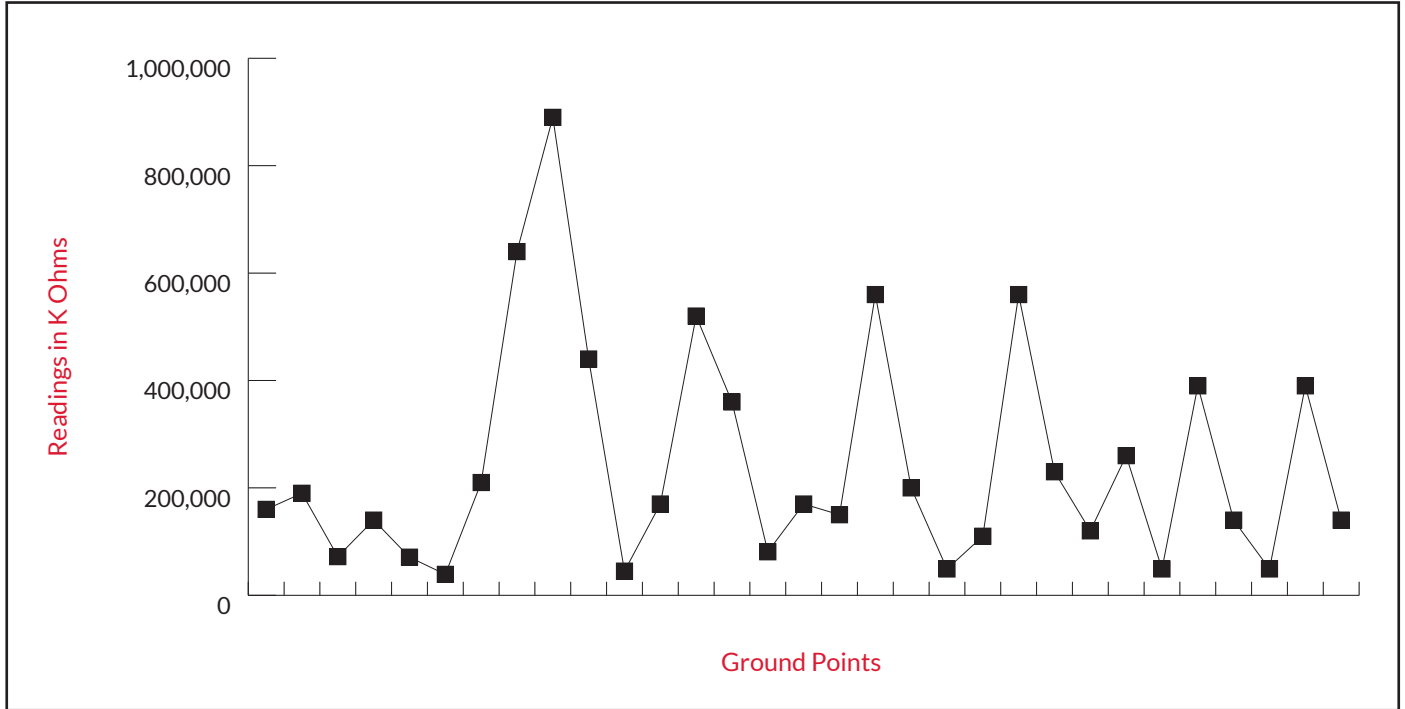
Surface to Ground Resistance

DATE TESTED	LOCATION	READING IN K OHMS	READING IN OHMS
2020-11-23	G/L #C17	140,000	1.4 x 10 ⁵
2020-11-23	G/L #D17	66,000	6.6 x 10 ⁴
2020-11-19	G/L #B18	330,000	3.3 x 10 ⁵
2020-11-19	G/L #C18	270,000	2.7 x 10 ⁵
2020-11-19	G/L #C16	310,000	3.1 x 10 ⁵
2020-11-19	G/L #C15	110,000	1.1 x 10 ⁵
2020-11-19	G/L #C14	400,000	4.0 x 10 ⁵
2020-11-19	G/L #D18	48,000	4.8 x 10 ⁴
2020-11-19	G/L #D16	110,000	1.1 x 10 ⁵
2020-11-19	G/L #D15	94,000	9.4 x 10 ⁴
2020-11-19	G/L #D14	230,000	2.3 x 10 ⁵
2020-11-13	G/L #C13	66,000	6.6 x 10 ⁴
2020-11-13	G/L #C12	60,000	6.0 x 10 ⁴
2020-11-13	G/L #C11	100,000	1.0 x 10 ⁵
2020-11-13	G/L #C10	53,000	5.3 x 10 ⁴
2020-11-13	G/L #C9	210,000	2.1 x 10 ⁵
2020-11-13	G/L #D13	46,000	4.6 x 10 ⁴
2020-11-13	G/L #D12	180,000	1.8 x 10 ⁵
2020-11-13	G/L #D11	69,000	6.9 x 10 ⁴
2020-11-13	G/L #D10	470,000	4.7 x 10 ⁵
2020-11-13	G/L #D9	450,000	4.5 x 10 ⁵
2020-11-13	G/L #D8	68,000	6.8 x 10 ⁴
2020-11-13	G/L #D7	43,000	4.3 x 10 ⁴
2020-11-13	G/L #D6	290,000	2.9 x 10 ⁵
2020-11-13	G/L #D5	390,000	3.9 x 10 ⁵
2020-11-13	G/L #D4	580,000	5.8 x 10 ⁵
2020-11-13	G/L #D3	440,000	4.4 x 10 ⁵
2020-11-13	G/L #D2	87,000	8.7 x 10 ⁴
AVERAGE RESISTANCE		203,928.6	2.04 x 10⁵

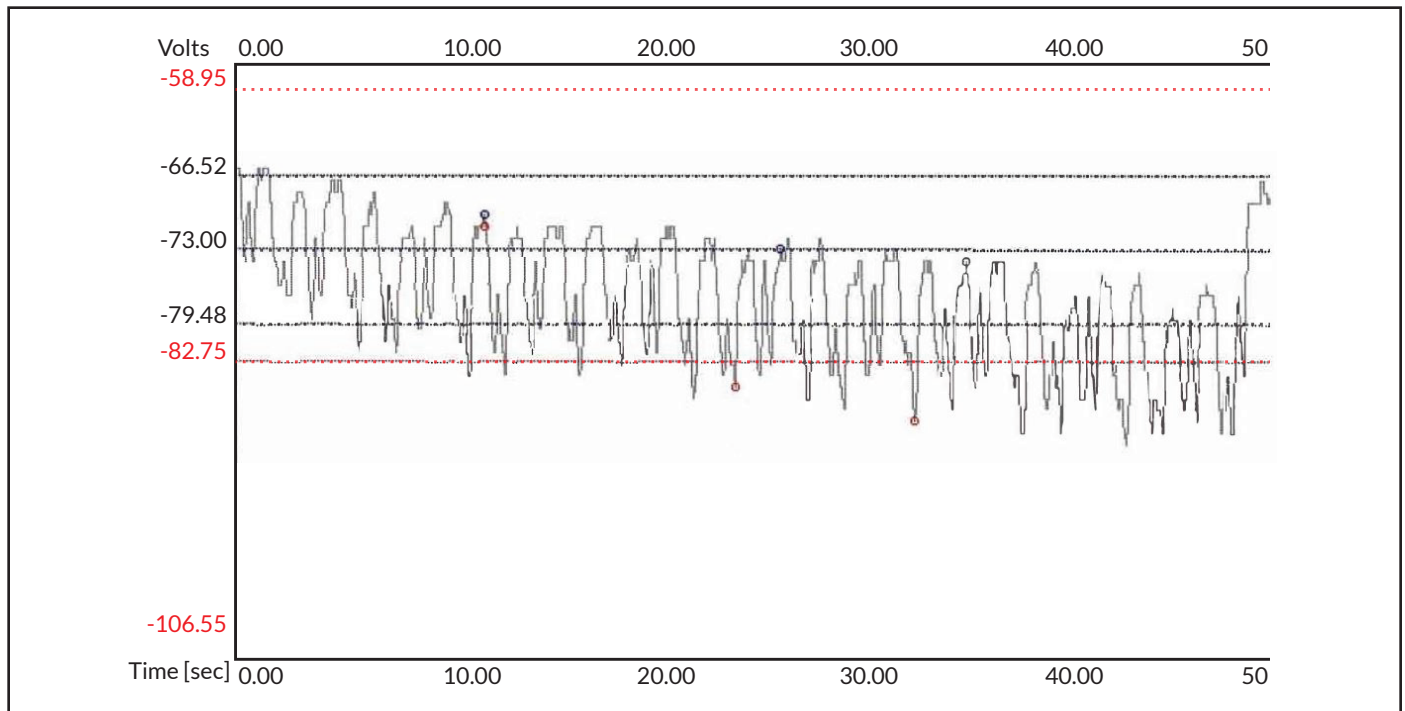
Surface to Ground Resistance Record

DATE TESTED	LOCATION	READING IN K OHMS	READING IN OHMS
2023-11-11	G/L #E18	160,000	1.6 x 10 ⁵
2023-11-11	G/L #E18/A	190,000	1.9 x 10 ⁵
2023-11-11	G/L #E17/A	72,000	7.2 x 10 ⁴
2023-11-11	G/L #E16/A	140,000	1.4 x 10 ⁵
2023-11-11	G/L #E15/A	71,000	7.1 x 10 ⁴
2023-11-11	G/L #E14/A	39,000	3.9 x 10 ⁴
2023-11-11	G/L #E13/A	210,000	2.1 x 10 ⁵
2023-11-11	G/L #E12/A	640,000	6.4 x 10 ⁵
2023-11-11	G/L #E11/A	890,000	8.9 x 10 ⁵
2023-11-11	G/L #E10/A	440,000	4.4 x 10 ⁵
2023-11-11	G/L #E18/B	45,000	4.5 x 10 ⁴
2023-11-11	G/L #E17/B	170,000	1.7 x 10 ⁵
2023-11-11	G/L #E16/B	520,000	5.2 x 10 ⁵
2023-11-11	G/L #E15/B	360,000	3.6 x 10 ⁵
2023-11-11	G/L #E14/B	81,000	8.1 x 10 ⁴
2023-11-11	G/L #E13/B	170,000	1.7 x 10 ⁵
2023-11-11	G/L #E12/B	150,000	1.5 x 10 ⁵
2023-11-11	G/L #E11/B	560,000	5.6 x 10 ⁵
2023-11-11	G/L #E10/B	200,000	2.0 x 10 ⁵
2023-11-11	G/L #F18	49,000	4.9 x 10 ⁴
2023-11-11	G/L #F17	110,000	1.1 x 10 ⁵
2023-11-11	G/L #F16	560,000	5.6 x 10 ⁵
2023-11-11	G/L #F15	230,000	2.3 x 10 ⁵
2023-11-11	G/L #F14	120,000	1.2 x 10 ⁵
2023-11-11	G/L #F13	260,000	2.6 x 10 ⁵
2023-11-11	G/L #F12	49,000	4.9 x 10 ⁴
2023-11-11	G/L #F11	390,000	3.9 x 10 ⁵
2023-11-11	G/L #F10	140,000	1.4 x 10 ⁵
AVERAGE RESISTANCE		250,571.4	2.55 x 10⁵

Surface to Ground Resistance Visual Graph



Body Volt Generation Analysis Test Summary



Data Summary

Number of Full Test Cycles	4		Standing	Walking	Global
			-73.00	-82.75	-77.32
Peak Recorded Value	-88.00	Average Voltage (V)	2.16	7.93	
ANSI/ESD STM 97.2	-87.00	Standard Deviation	-75.00	-88.00	90.00
	-85.00	Minimum Voltage (V)	-70.00	-70.00	66.00
		Maximum Voltage (V)			

Surface to Surface Resistance Record

DATE TESTED	LOCATION	READING IN K OHMS	READING IN OHMS
2023-11-11	G/L #E18/A	130,000	1.3 x 10 ⁵
		360,000	3.6 x 10 ⁵
2023-11-11	G/L #E17/A	140,000	1.4 x 10 ⁴
		88,000	8.8 x 10 ⁴
2023-11-11	G/L #E16/A	290,000	2.9 x 10 ⁵
		220,000	2.2 x 10 ⁵
2023-11-11	G/L #E15/A	120,000	1.2 x 10 ⁵
		35,000	3.5 x 10 ⁴
2023-11-11	G/L #E14/A	50,000	5.0 x 10 ⁴
		44,000	4.4 x 10 ⁴
2023-11-11	G/L #E13/A	180,000	1.8 x 10 ⁵
		200,000	2.0 x 10 ⁵
2023-11-11	G/L #E12/A	420,000	4.2 x 10 ⁵
		170,000	1.7 x 10 ⁵
2023-11-11	G/L #E11/A	73,000	7.3 x 10 ⁴
		90,000	9.0 x 10 ⁴
2023-11-11	G/L #E10/A	85,000	8.5 x 10 ⁴
		250,000	2.5 x 10 ⁵
2023-11-11	G/L #E18/B	42,000	4.2 x 10 ⁴
		220,000	2.2 x 10 ⁵
2023-11-11	G/L #E17/B	34,000	3.4 x 10 ⁴
		460,000	4.6 x 10 ⁵
2023-11-11	G/L #E16/B	47,000	4.7 x 10 ⁴
		600,000	6.0 x 10 ⁵
2023-11-11	G/L #E15/B	55,000	5.5 x 10 ⁴
		39,000	3.9 x 10 ⁴
2023-11-11	G/L #E14/B	110,000	1.1 x 10 ⁵
		69,000	6.9 x 10 ⁴
2023-11-11	G/L #E13/B	49,000	4.9 x 10 ⁴
		250,000	2.5 x 10 ⁵
2023-11-11	G/L #E12/B	820,000	8.2 x 10 ⁵
		62,000	6.2 x 10 ⁴
2023-11-11	G/L #E11/B	59,000	5.9 x 10 ⁴
		49,000	4.9 x 10 ⁴

2023-11-11	G/L #E10/B	500,000	5.0×10^5
		56,000	5.6×10^4
2023-11-11	G/L #F18	38,000	3.8×10^4
		640,000	6.4×10^5
2023-11-11	G/L #F17	68,000	6.8×10^4
		38,000	3.8×10^4
2023-11-11	G/L #F16	290,000	2.9×10^5
		67,000	6.7×10^4
2023-11-11	G/L #F15	63,000	6.3×10^4
		710,000	7.1×10^5
2023-11-11	G/L #F14	440,000	4.4×10^5
		73,000	7.3×10^4
2023-11-11	G/L #F13	63,000	6.3×10^4
		60,000	6.0×10^4
2023-11-11	G/L #F12	350,000	3.5×10^5
		120,000	1.2×10^5
2023-11-11	G/L #F11	210,000	2.1×10^5
		70,000	7.0×10^4
2023-11-11	G/L #F10	460,000	4.6×10^5
		56,000	5.6×10^4
AVERAGE RESISTANCE		189,018.18	1.89×10^5

Surface to Surface Resistance Visual Graph

