ANSI ESD S7.1

PROTECTION OF ELECTROSTATICAL DISCHARGE OF SUSCEPTIBLE ITEMS

GENERAL PRINCIPLE

This test method is used to measure the electrical resistance of floor materials. Measurements are made from the material surface to groundable points from surface to surface. Both tests are performed at varying humidity.

TEST RESULTS

	SURFACE TO GROUND WITH GROUNDING CORDS ATTACHED RG	
	50% humidity	12% humidity
AVERAGE	3 x 10^8 Ω	2 x 10^8 Ω

	SURFACE TO SURFACE RP	
	50% humidity	12% humidity
AVERAGE	5 x 10^8 Ω	5 x 10^8 Ω

INTERPRETATION OF THE RESULTS

The result of the test is expressed in resistance surface to ground (Rg) and surface to surface (Rp) (surface to surface is also called point to point). The requirement for a mat to be conductive must give an electrical resistance reading of 10-4 up to 10-6 Ohms. The requirement for a mat to be dissipative must give an electrical resistance reading of 10-6 up to 10-9 Ohms. In other words, electricity present in the human body that needs to be evacuated meets with less resistance to ground in the case of a conductive mat. Dissipative mats discharge electricity albeit with a higher degree of resistance.

Conductive mats are used in highly specialized environments which require a higher level of safety measures, whereas dissipative mats are used in more common work environments where static electricity needs to be evacuated to prevent damage to sensitive devices and unpleasant static shocks to workers.

The outcome of the above test meets the dissipative criteria.

The most meaningful interpretation is to compare the Protection of Electrical Discharge test results of all NOTRAX® Floor Matting products.

All testing of NOTRAX® Floor Matting has been performed by an independent testing laboratory.