Conductive or Static Dissipative ESD Control Tile Choices

Conductive vs. Statmate: Which is the Right Tile for You?

VPI invented anti-static electro-static discharge (ESD) STATIC DISSIPATIVE tile branded as VPI STATMATE in the late 1940’s to help health care providers reduce the risk of “static sparking” in hospital operating rooms.

Prior to the invention of VPI static control tile, there had been many hospital explosions resulting from oxygen tanks being ignited by “static sparking”.

In its simplest form “static sparking” is caused when two objects rub together creating an electrical charge that, upon discharge, generates a visible or invisible spark that in turn, can cause a fire or explosion.

VPI static control floors eliminate or reduce the amount of static electricity in an environment by “channeling” the static electricity away through the floor.

Today the need for VPI static control tile is still very important as oxygen use and “static sparking” remains common in American hospitals. Recently, the Wall Street Journal reported that there are 650 surgical fires in the United States every year and up to three to four times as many near misses. Any healthcare provider can avoid the risk of fire by installing a VPI static control floor.

In addition to healthcare, businesses involved in the manufacture or use of electronic components, equipment or systems also face problems resulting from the generation and discharge of static electricity. Indeed, fast forward to today where electrical equipment and electronic components can be damaged or impacted by the smallest static discharge and VPI static control tile becomes a critical part of any environment where electronics or related systems are utilized. While humans feel a static shock at a much higher voltage level than it takes to damage or disrupt sensitive electronics, static levels that are seemingly imperceptible can actually cause significant problems. In today’s high-tech world, smaller and faster electronic systems are more susceptible to damage caused by static electricity and thus require much greater protection.

Continuing its mission as an industry leader, VPI addressed these problems faced by healthcare providers and manufacturers alike by developing and introducing STATMATE original static dissipative tile and later a new anti-static electro-static discharge (ESD) CONDUCTIVE tile, branded as VPI CONDUCTILE, that can eliminate static electricity twenty times faster than conventional static dissipative tiles.

Because of these VPI inventions, there are two ESD tile choices today; either STATIC DISSIPATIVE TILES or CONDUCTILE TILES; notably both invented by VPI the world leader in anti-static flooring.
Both offer protection, are priced the same and look identical. Typically, most people default to a static dissipative floor because it “sounds right”, the thinking being that the goal is to dissipate the static electricity, not conduct it.

However, while VPI supplies both options, in the vast majority of applications the best ESD flooring option is a conductive floor. This is because, as mentioned above, conductive floors eliminate static electricity up to twenty times faster than static dissipative floors.

The longer that static electricity is “allowed to stay in the environment” the more likely the chance of damage. Therefore, the quicker static electricity can be conducted away from the environment the better and because VPI Conductive ESD tiles does this twenty times faster than static dissipative tiles the default choice should always be conductive tiles.

Indeed, more and more ESD flooring experts increasingly support the viewpoint that conductive flooring should be used everywhere static protection is required.

Lastly, both STATMATE AND CONDUCTILE emit zero VOC’s as standard and at no extra cost and so either can be used as the very best choice for clean rooms where VOC elimination is critical.