

electrostatic dissipative products

# Electrostat®



## Reliable Performance

Performance Panels Limited have established a reputation for servicing the needs of niche markets by offering specialist, high performance sheet materials and their composites for fabrication.



high performance materials for specialist applications

Electrostat is no exception - manufactured to the most exacting performance specification. Electrostat is a range of static dissipative materials which have been developed specifically for environments where there is a high degree risk of damage from static discharge.



distribution from stock

Stock items are normally delivered in 3-5 working days from receipt of instructions.

Please refer to our sales office for lead times on manufactured components.

## the problem

An electrostatic discharge results from a transfer of charge between bodies at different potentials. This is caused by everyday activities where contact and separation of surfaces occur. If the discharge occurs through or near sensitive electronic components, damage is an inevitable consequence.



*Industry experts estimate that approximately 33% of all electronic component failures, are due to the effects of electrostatic discharge (ESD).*

*If this fact is calculated in financial terms, the cost to business must run into tens of millions of pounds. On the other hand, if the cost is assessed in terms of reputation or perceived product reliability, it is probably significantly higher.*

## the rationale

In both production and product assembly, electronic components must be protected from electrostatic discharge to ensure reliability when in service. To achieve this objective the whole working environment must be considered as part of a complete programme of ESD control.

## the solution

Electrostat materials have been specifically developed for this task by providing a controlled path to ground for the dissipation of static electricity.

All Electrostat materials have a resistance to ground of between  $>7.5 \times 10^5 - <1 \times 10^9 \Omega$ , making them ideally suited for a wide variety of applications, where the threat of static is a concern. Electrostat can be fabricated to form **bench tops, furniture carcass elements and wall panel systems.**





Electrostat RC

## chipboard (RC)

A key component for Electrostat composite materials. This specialised chipboard incorporates carbon which provides an enhanced path to ground.



Electrostat HPL

## high pressure laminate (HPL)

Electrostat dissipative High Pressure Laminate has excellent scratch and chemical resistant properties, as well as being easy to clean. Electrostat HPL is available in both standard and postforming grades.



Electrostat MFC

## melamine faced chipboard (MFC)

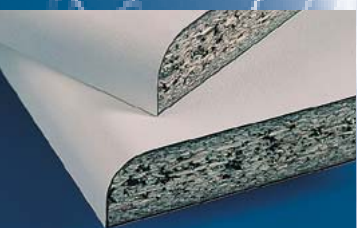
Electrostat MFC is the economic alternative to laminate faced chipboard and is ideal for the manufacture of desktops, desk carcass components and wall linings. This composite is manufactured using the Electrostat chipboard and can be colour co-ordinated with Electrostat laminates for visual harmony.



Electrostat LFC

## laminate faced chipboard (LFC)

A dissipative composite using Electrostat raw chipboard and static dissipative HPL to provide a controlled path to ground. This type of composite removes the requirement for a surface mounted grounding stud.



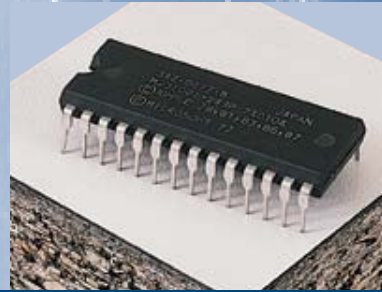
Electrostat PFC

## postformed component (PFC)

Postformed laminate composite with factory finished postformed edge detail. The postformed edge can be specified as either one long edge or two long edges.

## features

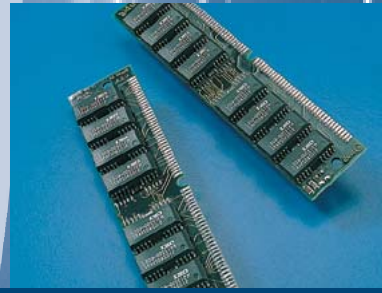
- All Electrostat products meet the requirements of BS IEC 61340-5-1.
- Volume resistivity for all materials  $>7.5 \times 10^5 - <1 \times 10^9 \Omega$
- Uniform, controlled dissipation of static electricity across all Electrostat materials.
- Electrostat products are compatible with other ESD products to provide a complete ESD solution.
- Electrostat surface materials have excellent resistance to organic solvents, weak acids, heat and abrasion.
- Manufactured composites using the Electrostat raw chipboard do not require a surface mounted grounding stud.
- All Electrostat surface materials are visually compatible.



static dissipative



cleanroom applications



electronics manufacture








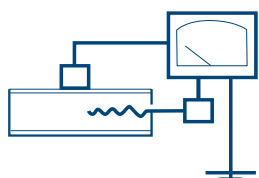
chemical resistant

## applications

- Wall Lining and Partitioning Systems
- Benchtops and Workstations
- Furniture Carcasses
- Shelving and Storage Systems
- Call Centre Furniture
- Electronic Installation Areas i.e. automotive industry
- Electronic Assembly Areas

## technical information

Details	Raw Chipboard (RC)	High Pressure Laminate (HPL)	Melamine Faced Chipboard (MFC)	Laminate Faced Chipboard (LFC)	Postformed Components (PFC)
					
Sheet Size (mm)	2750 x 2050mm	2750 x 2020mm 2750 x 1000mm	2750 x 2050mm	2750 x 2020 mm	2750 x 125mm (minimum)
	Larger sheet/board sizes on request				5500 x 1300mm (maximum)
Thickness (mm)	19, 25, 28.4, 30, 38mm	0.8 standard 0.6 postforming	19, 25, 28.4, 30, 38mm	20.6, 26.6, 30, 31.6, 39.6mm	20.2, 26.2, 29.6, 31.2, 39.2mm 10mm radius one or two long edges on request
Light Stability	-	Level 6 to EN 438			
Resistance to Heat	-	Resistant to molten solder. Oilpot test 20 minutes at 180°C and cigarette test. Meets the requirements of EN 438			
Abrasion and Scratch Resistance	-	All designs to Level 3 respectively - class H to EN 438			
Chemical Resistance	-	Resistant to organic solvents, weak acids, alkali, petrol and oil. Meets the requirements of EN 438			
Formaldehyde Emissions	Class E1				
Volume Resistivity $R_V$	$>7.5 \times 10^5 - <1 \times 10^9 \Omega$ conforming to BS IEC 61340-5-1				



volume resistivity  $R_V$  (all materials)

$>7.5 \times 10^5 - <1 \times 10^9 \Omega$

BS IEC 61340-5-1

Other products available from  
Performance Panels Limited

Trespa<sup>®</sup> Product Range incorporating  
TopLab<sup>PLUS</sup>, Athlon and Virtuon for:

Laboratory Work Benching

Wall Linings

Washrooms Lockers and Cubicles

Retail and Office Furniture Applications

Coramine Coraplast and Coralux for:

Partitioning Systems

Furniture Applications



PERFORMANCE  
PANELS

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CONTROL ASSOCIATION