ICON DATA ESD VINYL

TECHNICAL DATA SHEET



"Innovative Access Flooring, *Sustainable Solutions*"

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ICON DATA ESD VINYL SYSTEM DETAILS

RECOMMENDED APPLICATIONS

DATA CENTRES SERVER ROOMS

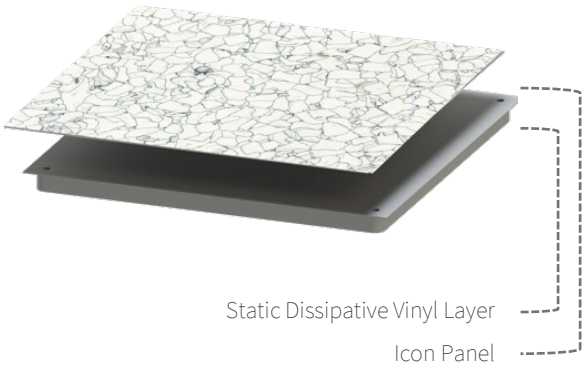
SYSTEM DETAILS

SYSTEM NAME:	Icon Data ESD Vinyl
DESCRIPTION:	Icon Data ESD Vinyl is a finished system designed for Computer and Data Centre environments. It can be used for mapping and distributing cabling, data and other electrical services in the sub-floor. The Icon Data ESD Vinyl system has a 2mm LG Staticpulse electrostatic conductive and static dissipative Vinyl covering. The Vinyl protects against voltage shorts that can occur with electrical equipment and creates an electrostatic discharge to help prevent buildup of the static electricity which could damage equipment.
LOAD LEVELS:	1000LBS | 1250LBS | 1500LBS | 2000LBS | 2500LBS



ICON PANEL DETAILS

SIZE:	600mm X 600mm
DEPTH:	33mm
CONSTRUCTION:	The panels consist of a hardened steel top and bottom sheet plate with corrosion resistant protection, inside and out, encapsulating a structural cementitious core.
CORE:	Cementitious Compound
FINISH:	LG Staticpulse 0.08in Vinyl surface finish.
TOLERANCE:	±0.25mm and a flatness tolerance of ±0.5mm measured on a diagonal across the top of the panel
CONNECTION:	The panel is gravity held on top of the stringer assembly.



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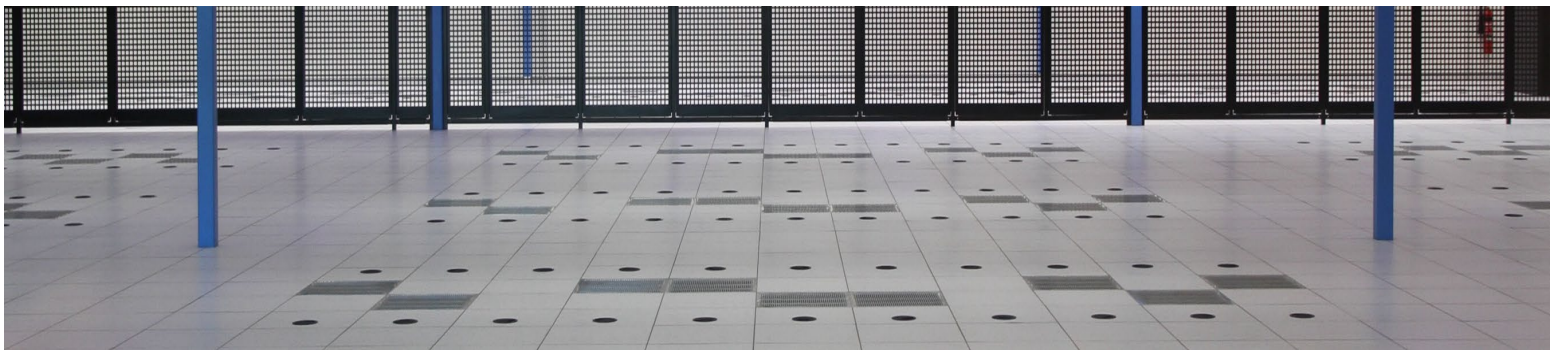
ICON DATA PEDESTAL DETAILS

SIZE:	100mm x 100mm base plate
CONSTRUCTION:	Corrosion resistant galvanised steel pedestal base, head and rod. Aluminium head assembly with locating ABS gasket.
LOCKING:	The pedestals will be provided with an adjusting and locking nut to maintain the assembly at a selected height, which requires a deliberate action to change the height setting, and which prevents vibration displacement.
FINISH:	Corrosion resistant galvanised finish.
CONNECTION:	The panel is screw fixed to the pedestal head at all four corners..
FFH:	The finished floor height of the access floor is measured from the sub floor to the top surface of the installed access floor.



ICON DATA STRINGER DETAILS

SIZE:	600mm
CONSTRUCTION:	Rectangular steel welded tube with 1.6mm sponge rubber foam.
FINISH:	Corrosion resistant galvanised finish with 1.6mm sponge rubber foam.
CONNECTION:	The stringer is screw fixed into the pedestal head.



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ICON DATA ESD VINYL SPECIFICATIONS AND TESTING

CISCA RECOMMENDED TEST PROCEDURES

ASP Access Floor systems are independently tested in accordance with the CISCA Recommended Test Procedures for Access Floors, the recognised performance standard for raised access flooring throughout North America. These test procedures evaluate structural performance, rolling load durability, pedestal stability, impact resistance and system serviceability, providing confidence that every ASP access floor system delivers reliable performance in demanding commercial and mission-critical environments.

TEST TYPE	STANDARD	DESCRIPTION
STRUCTURAL	CISCA Section 1	Concentrated Load
STRUCTURAL	CISCA Section 2	Ultimate Load
STRUCTURAL	CISCA Section 3	Rolling Load
STRUCTURAL	CISCA Section 4	Stringer Uniform Load
STRUCTURAL	CISCA Section 5	Pedestal Axial Load
STRUCTURAL	CISCA Section 6	Pedestal Overturning Moment
STRUCTURAL	CISCA Section 7	Panel Drop Test
STRUCTURAL	CISCA Section 8	Impact Load Test
STRUCTURAL	CISCA Section 9	Panel Cut-Out Test

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ICON DATA ESD VINYL SPECIFICATIONS AND TESTING

ICON DATA ESD VINYL PERFORMANCE RESULTS

Tested as per CISCA Recommended Test Procedures

CONCENTRATED LOAD	1000LBS	1250LBS	1500LBS	2000LBS	2500LBS	3000LBS
ULTIMATE LOAD	28.9kN	33.2kN	42.1kN	45kN	48.1kN	49.8kN
UNIFORM LOAD	23.3 kN/m2	33.1 kN/m2	42.6 kN/m2	49.8 kN/m2	58.3 kN/m2	66.9 kN/m2
IMPACT LOAD	0.67kN	0.67kN	0.67kN	0.67kN	0.67kN	0.9kN
PANEL WEIGHT (KG)	14.5	15.6	16.2	18.5	19.4	21.2
SYSTEM WEIGHT (KG/M2 @ 450MM FFH)	46.7	49.8	51.4	57.8	60.3	65.4

ICON DATA ESD VINYL DYNAMIC ROLLING RESULTS

Tested as per CISCA Recommended Test Procedures

WHEEL SIZES/CYCLES	1000LBS	1250LBS	1500LBS	2000LBS	2500LBS	3000LBS
76 x 31 mm (10 PASSES)	3.6kN	4.45kN	5.6kN	6.7kN	8.9kN	11kN
152 x 51 mm (10,000 PASSES)	3.0kN	3.6kN	4.5kN	5.6kN	7.1kN	8.9kN

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PERFORMANCE TESTING

TEST TYPE	STANDARD	RESULT
FIRE	BS 476-4 Non-combustibility test	Non-combustible
FIRE	EN-13501-1 European Fire Classification System	A1fl
FIRE	ASTM E84 Surface Burning Characteristics (Flame spread and smoke development)	Class A
FIRE	ASTM E119 Fire Resistance of Complete Building Assemblies	Integrity 60mins / Insulation 23mins
FIRE	EN ISO 1182 Non-Combustibility Test	Pass
FIRE	EN ISO 1716 Heat of Combustion Test	Pass
FIRE	ISO 9239.1 Mean Distance of Flame Travel	30 mm
FIRE	ISO 9239.1 Average Critical Radiant Flux	≥11.5kW / m^2
FIRE	ISO 9239.1 Average Integrated Smoke Value	11% x min
INDOOR AIR QUALITY	CDPH Standard Test Method v1.2 (California Section 01350)	Pass
INDOOR AIR QUALITY	ASTM D5116 Environmental Chamber VOC Test	Pass
ACOUSTIC	ASTM E492-09 Impact Sound Transmission	IIC 60
ACOUSTIC	ISO 10140-3 Laboratory Measurement of Impact Sound Insulation	Ln,w 40 dB
ASBESTOS	NIOSH9002 Bulk Asbestos Analysis	Not detected
SLIP RESISTANCE	DIN 51130:2014-02 Slip Resistance (oil-wet ramp test)	R9
SALT SPRAY TEST	ASTM B117-18 Neutral Salt Spray Test	Pass – No corrosion
HEALTH & SAFETY	Respirable Crystalline Silica Analysis	Laboratory Tested

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PERFORMANCE OF SURFACE FINISH

ITEM	Standard test Method	Specification	Conductive Tile	Static Dissipative Tile
Electrical/Electrostatic Properties				
Electrical Resistance	ASTM F 150, ESD S 7-1	Conductive:2.5×10^{4}1.0×10^{6} Ω Static Dissipative: 1.0×10^{6}~1.0×10^{9} Ω	2.5×10^{4} ~ 1.0×10^{6} Ω	1.0×10^{6} ~ 1.0×10^{9} Ω
Static Generation	AATCC-134		0.1kV	0.2kV
Static Decay Time	Federal Test Method 101B Method 4046	< 0.5 sec	0.01 sec	0.01 sec
Other Properties				
Classification	ISO 10874		Class 34 / 43	
Composition of Material	ASTM F 1700, Certificate of Compliance		Homogeneous	
Thickness	ASTM F 386, EN 428	as specified ± 0.13mm	Meet Standard	
Nominal Sizes	ASTM F 2055, EN 427	<± 0.4 mm/305 mm	Meet Standard	
Squareness	ASTM F 2055	maximum 0.25 mm	Meet Standard	
Residual Indentation	ASTM F 1914, EN 433	Average Less than 8%, max single reading 10%	< 8 %	
Flexibility	ASTM F 137, ISO 24344	25.4mm mandrel, no crack or break	25.4mm mandrel, no crack or break	
Dimensional Stability	ASTM F 2199, EN 434	< 0.51 mm/305 mm	Meet Standard	
Resistance to Chemicals	ASTM F 925	No more than a slight change in surface dulling, surface attack or staining	No more than a slight change in surface dulling, surface attack or staining	
Reaction to Fire	EN13501-1		Bfl-s1	
Static Electrical Propensity	EN 1815		< 2kV	
Critical Radiant Flux	ASTM E 648, NFPA 253		Class 1(> 0.45 W/cm2)	
Smoke Density	ASTM E 662	< 450	< 450	
Resistance to Heat	ASTM F 1514	ΔE < 8 ave, max	Meet Standard	
Resistnace to Light	ASTM F 1515	ΔE < 8 ave, max	Meet Standard	
Color Fastness	EN ISO 105 B02	6 minimum	At least 6	
Thermal Conductivity	DIN 52612, ISO 12677		0.309 W/(m.k)	
Slip Resistance	DIN 51130		R9	
Wear Resistance	EN 660-2		Group M	
Castor Chair Test	ISO 4918		No Change	
Fulfils product requirements	EN 649		Yes	
Underwriters Laboratories	UL 779		Meet UL Standard	
Warranty				
Free from defects in Workmanship and materials*			Five years	
Conductivity*			Lifetime	

* The above technical data is subject to modification for the benefit of further improvements.
* LG Hausys EDS Control Tile is executive warranty is valid only when tile is installed with LG Hausys ESD Control Tile adhesive.

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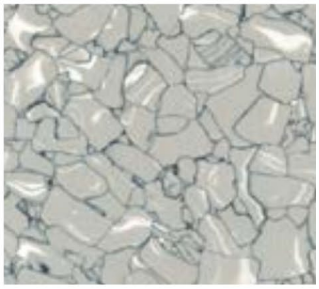
ICON DATA ESD VINYL COLOUR HUB

LG STATICPULSE VINYL COLOUR HUB


C/SD 6001

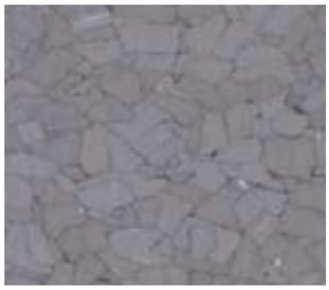

C/SD 6101

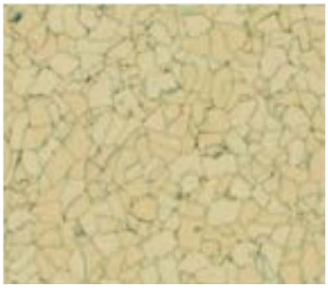

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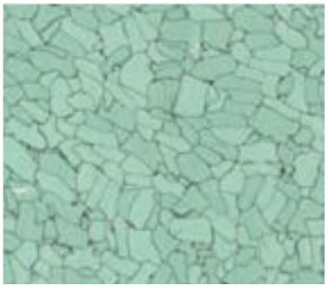

C/SD 6005


C/SD 601


C/SD 6200


C/SD 6062


C/SD 6072


C/SD 6082


C/SD 6092

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ICON DATA ESD VINYL LOAD GUIDELINES

Access floors may need to support the movement of heavy loads both during construction and after the space is in use. During construction, this can include transporting materials, tools and equipment across the floor. In a finished environment, it can include moving furniture, machinery or other equipment into place or even cleaning and maintenance procedures.

The guidelines below provide recommended unit loads and maximum total loads for each concentrated load rating, with separate values for travel with and without protection. Use them when planning how loads will be moved across the floor, taking into account the combined weight of the unit, operator and any materials being transported. Where protection is used, a suitable structural substrate must be installed along the entire path of travel.

Concentrated Load Rating	Without Protection – Recommended Unit Load*	Without Protection – Maximum Total Load*	With Protection – Recommended Unit Load*	With Protection – Maximum Total Load*
1,000 lb (4.5kN)	0.45 tonnes	0.50 tonnes	0.90 tonnes	0.95 tonnes
1,250 lb (5.6kN)	0.68 tonnes	0.78 tonnes	1.10 tonnes	1.20 tonnes
1,500 lb (6.7kN)	0.90 tonnes	1.00 tonne	1.35 tonnes	1.45 tonnes
2,000 lb (8.9kN)	1.12 tonnes	1.32 tonnes	1.48 tonnes	1.68 tonnes
2,500 lb (11.1kN)	1.37 tonnes	1.57 tonnes	1.72 tonnes	1.92 tonnes

**Loads include the unit, operator and any materials being transported. "Surface Protection" requires light surface protection such as coreflute or foam. "Structural protection" requires a suitable structural substrate to be installed along the entire path of travel.*

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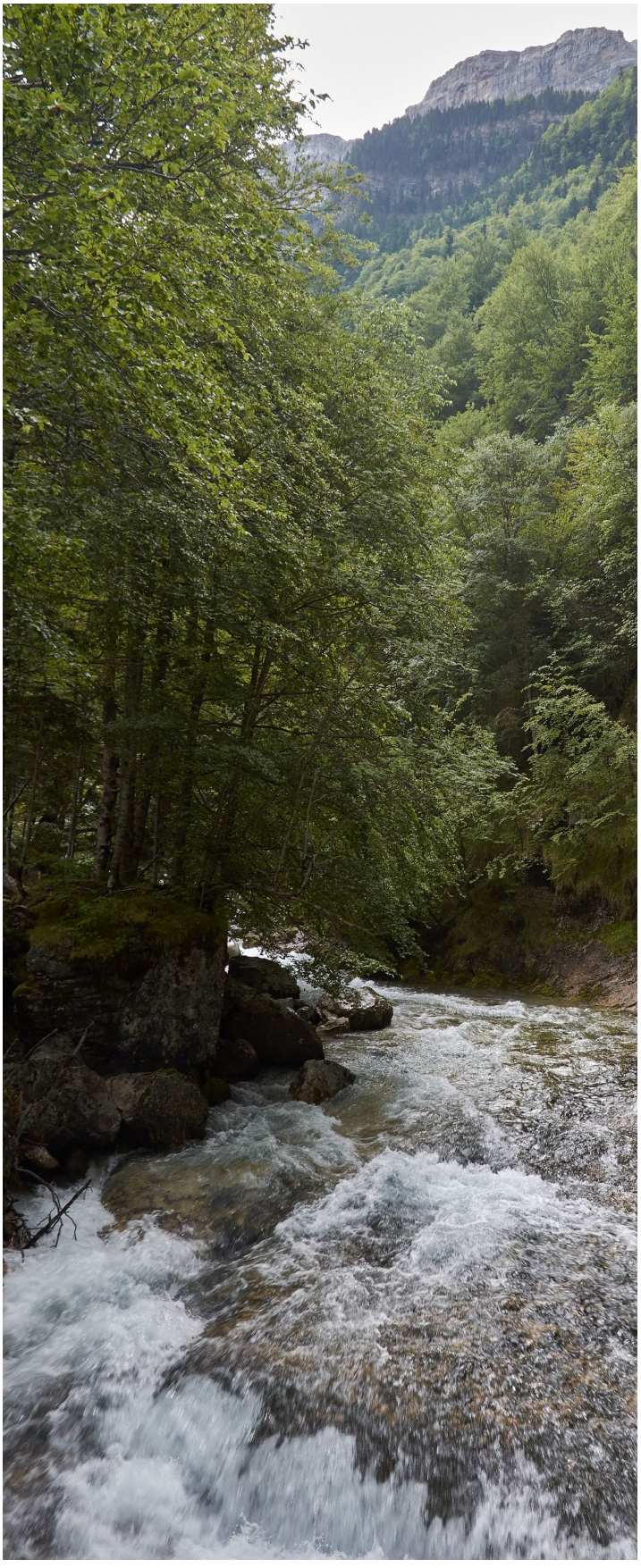
ICON DATA ESD VINYL SUSTAINABILITY CREDENTIALS

ORGANIZATIONAL COMMITMENTS

- ASP Environmental Policy ✅
- ISO 14001 ✅
- ISO 9001 ✅
- ISO 45001 ✅

INDOOR AIR IMPACTS

- VOC Emission Compliance Testing ✅



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ICON DATA ESD VINYL MAINTENANCE

MAINTENANCE GUIDE

CLEANING:

Remove dust and construction debris using a vacuum cleaner. Avoid sweeping the floor surface, as fine dust can migrate between panel joints and onto pedestal heads or stringers, potentially resulting in unwanted noise or reduced system performance.

PANEL REMOVAL & REINSTALLATION:

Only remove panels using an approved ASP panel lifting device.

Lift panels vertically to avoid damage to adjacent panels and pedestal heads

After maintenance beneath the floor, ensure each panel is correctly seated and securely fastened before returning the floor to service.

UNDERFLOOR ACCESS:

When carrying out maintenance to underfloor services:
- Remove only the minimum number of panels required.
- Avoid placing excessive loads on unsupported panels.
- Inspect pedestal heads and fasteners before reinstalling panels.
- Remove any debris from the underfloor plenum before replacing panels.

HEAVY LOADS:

Heavy equipment shall not be moved across the access floor without suitable load-spreading protection. Refer to ASP for allowable rolling loads and recommended floor protection.

SITE CONDITIONS:

During construction and throughout the service life of the floor, excessive dust, moisture and debris should be prevented from accumulating beneath the access floor. Maintaining a clean underfloor plenum will assist in preserving long-term system performance and minimising the potential for unwanted noise.

REPLACEMENT COMPONENTS:

Replacement panels and accessories should be supplied by ASP Access Floors to ensure compatibility with the installed system.



ASP

ACCESSFLOORS

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