

ICON DATA HPL

TECHNICAL DATA SHEET



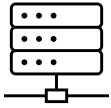
“Innovative Access Flooring, *Sustainable Solutions*”

ICON DATA HPL

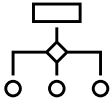
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ICON DATA HPL SYSTEM DETAILS

RECOMMENDED APPLICATIONS



DATA CENTRES



SERVER ROOMS

SYSTEM DETAILS

SYSTEM NAME:

Icon Data HPL

DESCRIPTION:

Icon Data HPL is a finished system designed for Computer Room and Data Centre environments. It can be used for mapping and distributing cabling, data and other services in the sub-floor.

The Icon Data HPL system has a 1.6mm thick anti-static High-Pressure Laminate covering. The HPL 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:

4.5kN | 6.0kN | 9.0kN | 11kN | 13kN



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:

Antistatic 1.6mm High Pressure Laminate.

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 HPL SYSTEM DETAILS

ICON DATA PEDESTAL DETAILS

- SIZE:** 100mm x 100mm base plate
- CONSTRUCTION:** Corrosion resistant galvanised steel pedestal base, head and rod 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 gravity held on top of the understructure..
- 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 HPL SPECIFICATIONS AND TESTING

AUSTRALIAN STANDARDS

ASP Access Floor systems are tested in accordance with AS 4154 – General Access Floors (Elevated Floors) using the AS 4155 series of Australian test methods. This comprehensive testing program evaluates structural loading, dimensional tolerances, durability, electrostatic performance and pedestal stability, providing confidence that each system complies with Australian performance requirements for general access floors.

TEST TYPE	STANDARD	DESCRIPTION
DIMENSIONAL	AS 4155.1	Panel Concavity and Convexity
DIMENSIONAL	AS 4155.2	Panel Twist
DIMENSIONAL	AS 4155.3	Panel Squareness
ENVIRONMENTAL	AS 4155.4	Effect of Temperature
ENVIRONMENTAL	AS 4155.5	Effect of Humidity
ELECTRICAL	AS 4155.6	Floor Resistance for Electrostatic Control
STRUCTURAL	AS 4155.7	300mm x 300mm Uniform Concentrated Load
STRUCTURAL	AS 4155.8	25mm x 25mm Concentrated Load
STRUCTURAL	AS 4155.9	Ultimate Load (Safety Factor)
STRUCTURAL	AS 4155.10	Dynamic Soft Body Impact Load
STRUCTURAL	AS 4155.11	Dynamic Rolling Load
STRUCTURAL	AS 4155.12	Pedestal Strength by Concentrated Vertical Load
STRUCTURAL	AS 4155.13	Pedestal Free Movement by Horizontal Load
STRUCTURAL	AS 4155.14	Pedestal Strength by Horizontal Movement

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ICON DATA HPL SPECIFICATIONS AND TESTING

ICON DATA HPL PERFORMANCE RESULTS

Tested as per Australian Standards AS4154/AS4155

CONCENTRATED LOAD	4.5kN	6.0kN	9.0kN	11.0kN	13.0kN
ULTIMATE LOAD	14.5kN	17.3kN	32.8kN	35.6kN	49.6kN
UNIFORM LOAD	23.2kN/m2	33.1kN/m2	49.8kN/m2	58.3kN/m2	66.9kN/m2
IMPACT LOAD	0.4kN	0.4kN	0.4kN	0.4kN	0.4kN
PANEL WEIGHT (KG)	14.2	15.5	17.4	20.1	21.2
SYSTEM WEIGHT (KG/M2 @ 450MM FFH)	45.9	49.5	54.7	62.2	65.4

ICON DATA HPL DYNAMIC ROLLING RESULTS

Tested as per Australian Standards AS4154/AS4155

WHEEL SIZES/CYCLES	4.5kN	6.0kN	9.0kN	11.0kN	13.0kN
75 X 25MM (10 PASSES)	4.4kN	5.5kN	6.7kN	8.9kN	11.0kN
150 X 50MM (10,000 PASSES)	3.3kN	4.4kN	5.5kN	6.7kN	8.9kN
200 X 75MM (40,000 PASSES)	2.25kN	2.25kN	2.25kN	2.25kN	2.25kN

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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	$\geq 11.5 \text{ kW / m}^2$
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	$L_{n,w}$ 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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ICON DATA HPL SPECIFICATIONS AND TESTING

PERFORMANCE OF SURFACE FINISH

PROPERTIES	REQUIREMENT TO NEMA LDS-2005 HGS	RESULT
Light Resistance	Rating Min: SL	Pass
Cleanability	Cleanability Rating: ≤20	Pass Cleanability Rating: 10
Boiling Water Resistance	No effect	Pass No effect
Ball Impact Resistance	Slight effect	Pass No effect
Dart Impact Resistance	≥1250mm	Pass >2000mm
Dimensional Change	≥500mm	Pass >1000mm
Room Temperature Dimensional Stability	X-direction: ≤0.8%	Pass X-direction: 0.58%
Wear Resistance	Y-direction: ≤0.5%	Pass Y-direction: 0.35%
Electronic Resistance	X-direction: ≤0.8%	Pass X-direction: 0.38%
Dry Floor Friction Test per AS/NZS 4586:2004		Class F
Wet Pendulum Test per AS/NZS 4586:2004		Class X
Oil Wet Ramp Test per AS/NZS 4586:2004		R9

HPL COLOUR HUB



VENTUS 8192



SOLIS 2010-5



STELLA 2103



TERRA 2158

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ICON DATA HPL 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	Surface Protection – Recommended Unit Load*	Surface Protection – Maximum Total Load*	Structural Protection – Recommended Unit Load*	Structural Protection – Maximum Total Load*
4.5kN	675kg	775kg	1.10 tonnes	1.20 tonnes
6.0kN	900kg	1.00 tonne	1.35 tonnes	1.45 tonnes
9.0kN	1.12 tonnes	1.32 tonnes	1.48 tonnes	1.68 tonnes
11.0kN	1.37 tonnes	1.57 tonnes	1.72 tonnes	1.92 tonnes
13.0kN	1.62 tonnes	1.82 tonnes	2.20 tonnes	2.40 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 HPL SUSTAINABILITY CREDENTIALS

ORGANIZATIONAL COMMITMENTS

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



LEED | WELL | GREENSTAR

- LEED Product Declaration
- GreenStar Product Declaration
- WELL Product Declaration



LIFE CYCLE IMPACTS

- Product Life Cycle Assessment (LCA)
- Environmental Product Declaration (EPD)
- Third-Party Verified Recycled Content



INDOOR AIR IMPACTS

- VOC Emission Compliance Testing



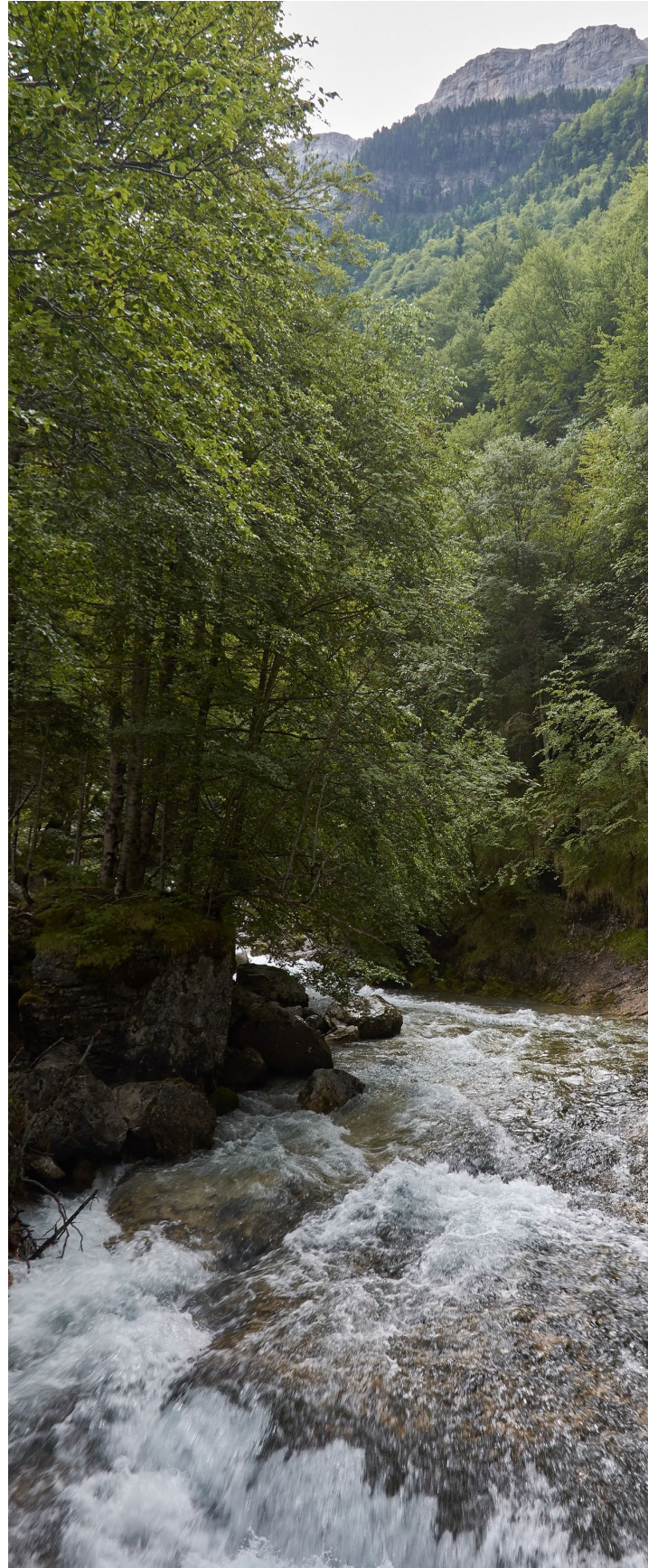
MATERIAL HEALTH AND TRANSPARENCY

- Red List Free - Restricted Substances Compliance
- Health Product Declaration (HPD)



CARBON NEUTRAL ACCESS FLOORING

- Walk Carbon Neutral Program Compatible



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ICON DATA HPL 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.





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