ICON AIR

TECHNICAL DATA SHEET

"Innovative Access Flooring, *Sustainable Solutions*"

ICON AIR

TECHNICAL DATA SHEET

ICON AIR SYSTEM DETAILS

RECOMMENDED APPLICATIONS

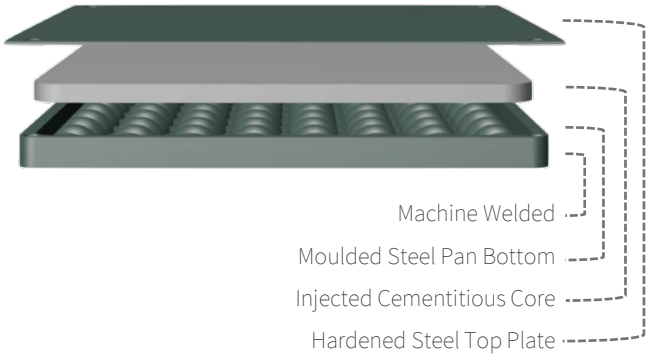
GENERAL OFFICE | LEARNING INSTITUTIONS | LIBRARIES | BANKS

SYSTEM DETAILS

SYSTEM NAME:	Icon Air
DESCRIPTION:	Icon Air is specifically designed for environments using an underfloor HVAC (heating, ventilation, and air conditioning) system. This system incorporates the use of a clip-on air-controlled stringer which creates a seal in between the panels to control and minimize air leakage. With the stringer seal, the underfloor cavity then converts into an air plenum.
LOAD LEVELS:	1000lbs | 1250lbs | 1500lbs | 2000lbs Note: For higher panel loads please see the ASP Icon Rigid Series.

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:	ASP's standard powder coated 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 screw fixed to the pedestal head at all four corners



ICON AIR

TECHNICAL DATA SHEET

ICON AIR SYSTEM DETAILS

ICON 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.

Note: For FFH over 800mm, please see the ASP Icon Rigid Series.

ICON AIR 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 clipped on top the pedestal head.

ICON AIR

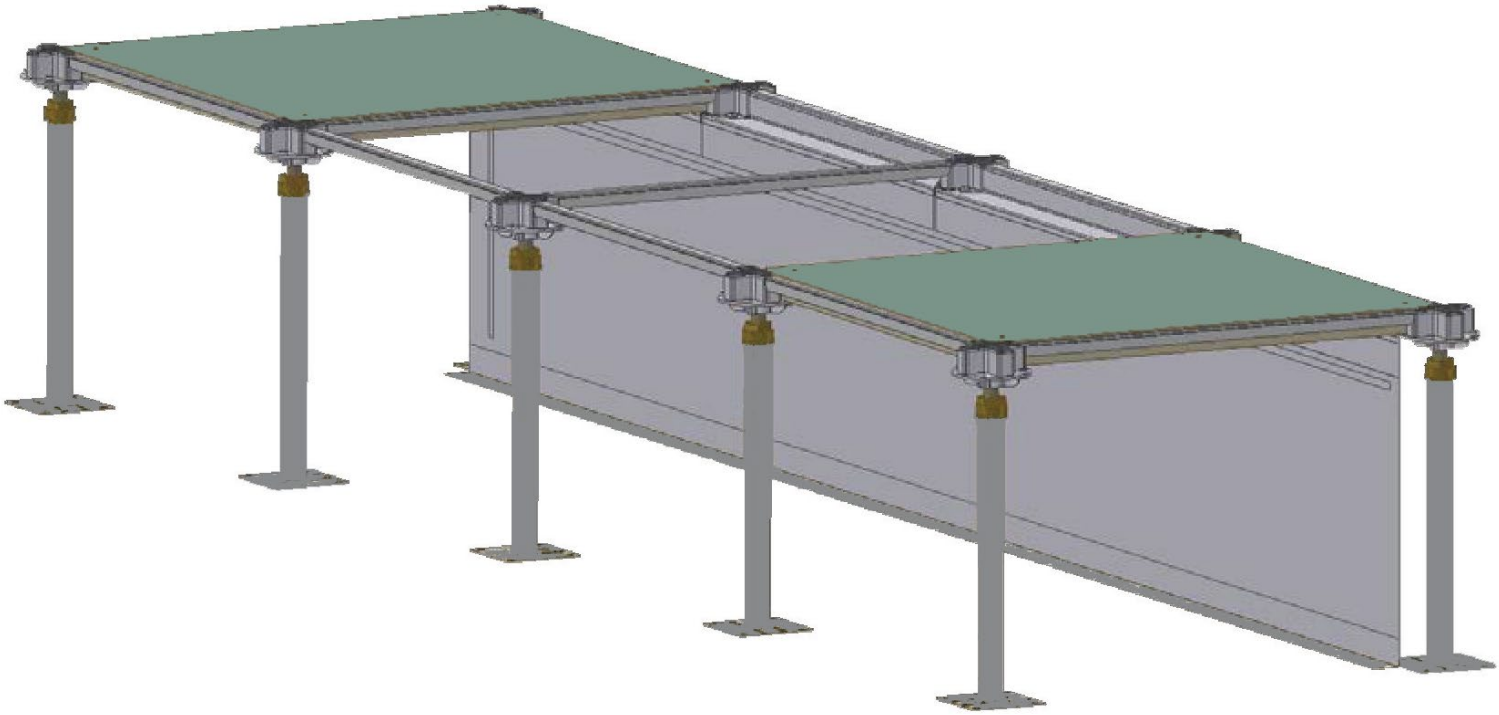
TECHNICAL DATA SHEET

ICON AIR SYSTEM DETAILS

ICON AIR ZONE BAFFLE

The ASP Icon Air Zone Baffle is a purpose-designed air containment system that integrates seamlessly with the ICON AIR raised access floor to create air-controlled underfloor zones. Manufactured from factory-engineered components with integrated sealing elements, the system enables rapid installation while reducing air leakage, improving pressure control and optimising the performance and energy efficiency of underfloor air distribution (UFAD) systems.

The system features a proprietary ICON AIR Zone Baffle Stringer that simply clips onto the pedestal head, providing a fast, secure and air-controlled installation without the need for specialised tools or complex assembly.



ICON AIR

TECHNICAL DATA SHEET

ICON AIR 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

ICON AIR

TECHNICAL DATA SHEET

ICON AIR SPECIFICATIONS AND TESTING

ICON X PERFORMANCE RESULTS

Tested as per CISCA Recommended Test Procedures

CONCENTRATED LOAD	1000LBS (4.5kN)	1250LBS (5.6kN)	1500LBS (6.7kN)	2000LBS (8.9kN)
ULTIMATE LOAD	28.9 kN	33.2kN	42.1kN	45kN
UNIFORM LOAD	23.3 kN/m^2	33.1 kN/m^2	42.6 kN/m^2	49.8 kN/m^2
IMPACT LOAD	68.4kg	68.4kg	68.4kg	68.4kg
PANEL WEIGHT (KG)	14.5	15.8	16.6	19
SYSTEM WEIGHT (KG/M^2 at 450mm FFH)	45.4	48.4	50.1	56.5

ICON AIR DYNAMIC ROLLING RESULTS

Tested as per CISCA Recommended Test Procedures

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

ICON AIR

TECHNICAL DATA SHEET

ICON AIR SPECIFICATIONS AND TESTING

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

ICON AIR

TECHNICAL DATA SHEET

ICON AIR 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

**Loads include the unit, operator and any materials being transported. "With protection" requires a suitable structural substrate to be installed along the entire path of travel.*

ICON AIR

TECHNICAL DATA SHEET

ICON AIR 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

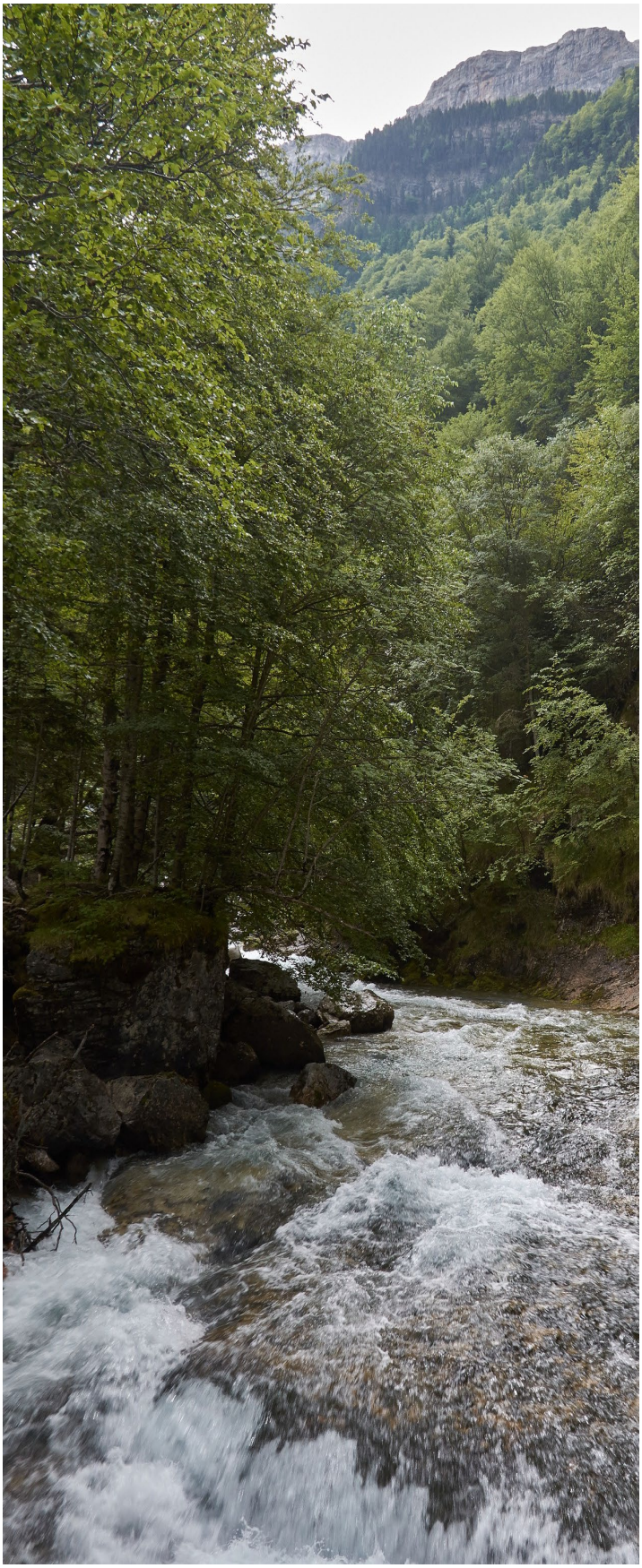
- VOC Emission Compliance Testing ✅

MATERIAL HEALTH AND TRANSPARENCY

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

CARBON NEUTRAL ACCESS FLOORING

- Walk Carbon Neutral Program Compatible ✅



ICON AIR

TECHNICAL DATA SHEET

ICON AIR 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.

FINISHES:

Before applying any floor finishes, thoroughly clean the entire raised access floor surface. Remove all dust and debris to prevent material becoming trapped between the panels or within the adhesive layer, which may lead to unwanted noise.

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

www.aspfloors.com