

SOLID LOCK

RAISED ACCESS FLOOR SPECIFICATION

This Specification covers The Solid Lock (General Office Standard GOS1), The Solid Lock (Computer Room Standard CRS2), The SolidLock (Computer Room Heavy Duty Standard CRH3). Capable of meeting the requirements of the Load Performance Table below.

The Raised Access Floor System consists of 600mm X 600mm X35mm modular and interchangeable steel panels, all supported by steel under-structure.

The completed and installed access floor system should be rigid and firm and free of rocking panels and or any movement. The final product once installed correctly must be free of any noise due to movement or other reasons that may to contribute negatively to the acoustic properties of the area.

Load Performance

Product Code	Application	Dimension	Concentrated Load	Impact Load	Ultimate Load	Safety Factor	Uniformly Distibuted Load	Rolling Load	
		mm	KG	N	N		NM ²	N	N
Solid Lock System			Deflection 2mm					10 Passes	10000 Passes
Solid Lock GOS 1	General Office Standard	600 x 600 x 35	363	671	≥ 10650	≥ 3 X	≥ 13590	3120	2260
Solid Lock CRS 2	Computer Room Standard	600 x 600 x 35	453	672	≥ 13320	≥ 3 X	≥ 16750	3550	3120
Solid Lock CRH 3	Computer Room Heavy Duty Standard	600 x 600 x 35	567	673	≥ 16650	≥ 3 X	≥ 19100	4440	3550

The product complies with EN10204 3.1 done at accredited laboratories to Specification (BS EN 12825:2001) and as per Cisca recommended Test Procedures for Access Floors 2007.

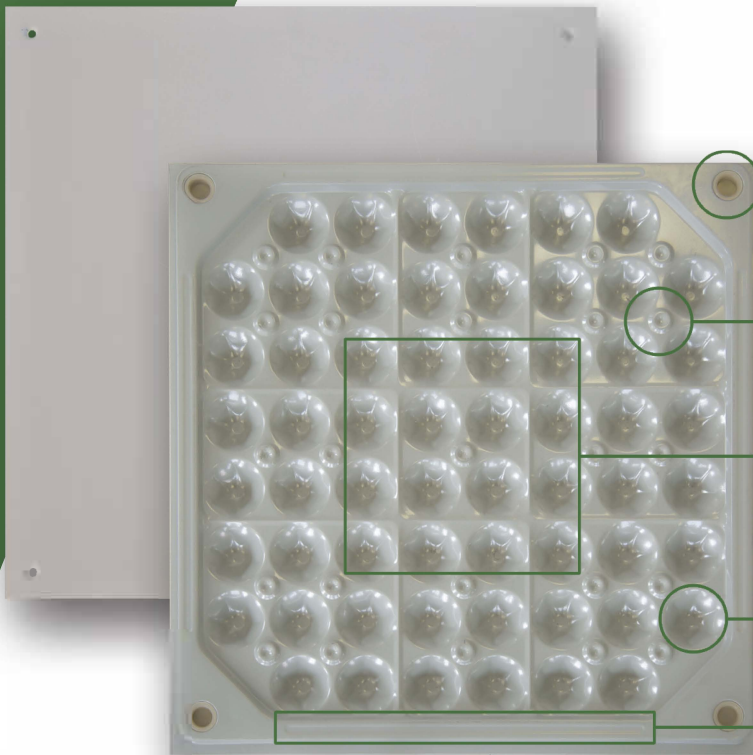
The raised access floor system must be manufactured under an integrated quality assurance System ISO 9001.

SOLID LOCK

COMPONENT SPECIFICATION

The Solid Lock access floor panel are structurally rigid linear assemblies fabricated from non-combustible components and consists of high hardness top steel sheet, welded to a deep drawing steel bottom section of domed formation. The underside of the panel shall consist of a specially designed four Corner self-locating and solid locking system. It has a 25 convex salient point structure. The panel has a # Type strengthening rib and a Star Shaped Dome Structure, all these additional design features result in the higher dimensional precision and panel strength. In addition to this the edges of the panel have a concaved strengthening rib to provide higher edge load capacity.

The exterior and interior surface of the panel is corrosion protected. The core of the panel is filled with a non-combustible cementitious compound. The exterior of the panel is epoxy coated.



Special Designed 4 Corner Solid Lock System
Flexible and simple for both bare and Laminated systems without having to change pedestals. Enables a higher load capacity.

Salient Points Structure
25 Salient points providing better load capacity.

Type Strengthening Rib
More ribs for a better load capacity and a more elegant finish.

Star Shape Dome Structure
More elegant appearance, higher dimensional precision and panel strength.

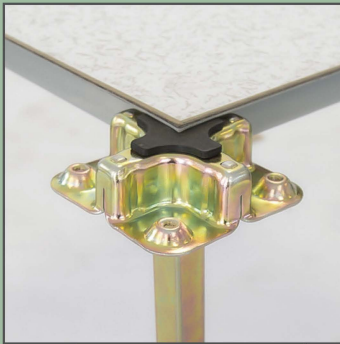


Wide Edge with Groove Strengthening Rib
Gives a higher edge load capacity.



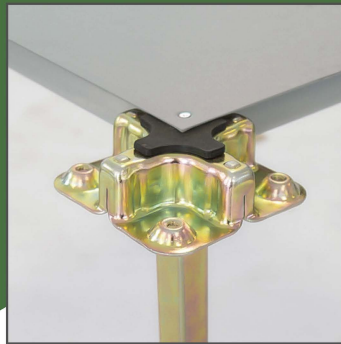
SOLID LOCK

ACCESS FLOOR IS A TRUE MULTIFUNCTIONAL SYSTEM



**SOLID LOCK
FREESTANDING
SYSTEM**

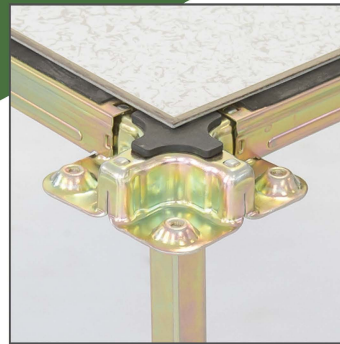
The Solid Lock Access Floor panel provide positive engagement with the steel pedestals at all four corners. The pedestal head that the panels are locating onto have a pvc gasket on the head and panel hole to minimize noise emission. This option does not require any screws and is fully functional without them.



**SOLID LOCK
SCREW-DOWN
SYSTEM**

The freestanding system is simply screwed in place by four corrosion resistant fasteners that bolt through the panel and mechanically fix the panel to the pedestal heads.

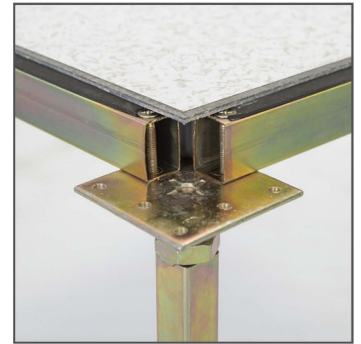
The panels are then able to be removed by simply releasing the fasteners as result of the Access Floor Systems panel positively locating into the steel head all fasteners may be removed without the loss of the floors lateral stability. This also applies to the Snap-on Stringer System.



**SOLID LOCK
SNAP-ON
STRINGER SYSTEM**

Simply open the panels and clip the steel Snap-On stringer into place on the pedestal head. The stringer comes with a pre-assembled rubber gasket to reduce any noise transfer from the panel into the room. Again, as a result of the Access Floor Panel Positively Locating onto the steel head the stringers can also be removed without the access floor system losing lateral stability.

The same pedestal head can be used for all 3 systems and will positively locate and self-align the pedestal head with the access floor panel.



**SOLID LOCK
BOLT-ON
STRINGER SYSTEM**

The Bolt on system uses a Steel flat head with drilled and tapped holes to accept the bolt on stringer tube with rubber gasket. This system is commonly used where higher load capacity is required. This understructure is also interchangeable with other panels within the Supertec Access Flooring product offerings making panels from the Solid Lock System interchangeable as well.

SOLID LOCK UNDER-STRUCTURE SYSTEM

The Solid Lock Under-Structure System is generic to the Freestanding System, the Screw-Down System and the Snap-on Stringer System. The understructure is universal to all 3 grades of floors, ranging from standard to heavy duty floors. The system consists of a steel die formed, factory assembled head and base which is surface treated with a corrosion-resistant finish. This assembly is capable of supporting a minimum load of 22.5kN. The Under structure must comply with CISCA Section 5 of 2007 test procedures for Pedestal Axial load.

Pedestal Axial Load Test

Pedestal	Ultimate Load (kN)
1	55.5
2	53.9
3	58.7
Average	56.0

A corrosion resistant lock nut with an anti-rotation & vibration proof feature is provided to allow the pedestal assembly to be adjusted over a range of 50mm (25mm up and 25mm

Pedestal Overturning Moment Test

This tests is done to determine the overturning moment of the pedestal assembly and must be done according to section 6 of CISCA recommended test procedures for access floors 2007.

Pedestal	Horizontal Load at Failure (N)	Overturning moment (Nm)
1	530	318
2	510	306
3	676	406
4	580	348
5	680	408
Average	595	357





SOLID LOCK SYSTEM TOLERANCES AND LIMITS

The access floor components and installed access floor system must conform to the requirements of the Tolerance and Limits Table below:

System Tolerances and Limits Table

Description	Tolerance / Limit
Panel Size	600 mm x 600 mm +0,00 mm -0,50 mm
Panel squareness	±0,50 mm
Panel flatness	±0,50 mm
Installed access floor level	1,50 mm in 3.00 m / 2,50 mm over the entire floor
Variation in height between adjoining panels	0,50 mm
Maximum depth of panel and pedestal head assembly	±40 mm
Maximum panel mass	16,5 kg
Maximum system mass	55 kg per m ²

FLAME AND SMOKE SPREAD FIRE TEST

This test describes the results of the ASTM E48-15b test for Surface Burning Characteristics of Building Materials.

The purpose of the test is to determine the surface burning behaviour of building materials. The test is applicable to exposed surfaces provided that the material or materials, by its own structural quality or manner in which it is tested and intended for the use, is capable of supporting itself in position or being supported during the test period.

The purpose of this method ASTM E48 (25 foot tunnel) is to determine the relative burning behaviour of the material by observing the flame spread along the specimen. Flame spread and smoke density developed are reported however there is not necessarily a relationship between these two measurements.

The test results show that there was no flame spread and or smoke that developed during the test period, after the burners were shut of no flames were observed. There was no significant change the appearance and functionality of the product besides some light charring on the burn side.

All components of the access floor system are to be non-combustible when tested in accordance with the above and the completed installation shall comply with the requirements of the National Building Regulations and Building Act of 1977 (as amended) where applicable.

COMPLIANCE WITH CODES AND LAWS

The construction of the raised access floor system and the materials and components used therein shall comply with all local codes and laws regarding safety and health.

OPENINGS IN PANELS

All openings in panels shall be trimmed and finished off with aluminum tape.

PEDESTAL ADHESIVE

All pedestals must be adhered to the sub floor with Pekay A660 two-part polyurethane adhesive. Once the adhesive has cured the pedestal and the adhesive shall be capable of resisting a horizontal force of 10 Kg applied at a height of 300mm from the sub-floor.

REQUIREMENTS OF THE TENDERER AND THE SUB-CONTRACTOR

1. Evidence that the Tenderer has the ability, knowledge and experience to undertake a large installation.
2. A track record confirming the above.
3. 12 Year Warranty on all access flooring components.
4. Certificates from an approved International Testing Laboratory showing compliance with this specification.
5. A Quality assurance document which includes control and management procedures.
6. A manual detailing Installation, care and maintenance procedures.

REQUIREMENTS OF THE MAIN-CONTRACTOR

- Providing a smooth and clean sub-floor free of any contaminants and irregularities.
- Providing datum points for setting out of the floor grid and for setting of the finished floor level.
- Ensuring that the work of all sub-trades in the plenum is completed and tested to the satisfaction of the contractor before the raised access floor installation commences.
- Providing work areas for installation of the raised access floor which are clean, sealed from the weather, and clear of all other trades for a period ending at least 48 hours from the time of completion of the raised access floor installation.
- Provide vertical hoisting facilities for the vertical loading of the materials onto the site.