

ST SYSTEM

RAISED ACCESS FLOOR SPECIFICATION

This Specification covers the ST 660 (General Office Standard), ST 800 (General Office & Computer Room Standard), the ST 1000 (Computer Room Standard), the ST 1250 (Computer Room Heavy Duty Standard).

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 contribute negatively to the acoustic properties of the area.

Load Performance

Product Code	Application	Dimension	Concentrated Load	Impact Load	Ultimate Load	Safety Factor	Uniformly Distributed Load	Rolling Load	
		mm	KG	N	N		NM ²	N	N
ST System			Deflection 2mm					10 Passes	10000 Passes
ST 660	General Office Standard	600 x 600 x 35	295	670	≥ 8850	≥ 3 X	≥ 12500	2260	1580
ST 800	General Office and Computer Room Standard	600 x 600 x 35	363	671	≥ 10650	≥ 3 X	≥ 13590	3120	2260
ST 1000	Computer Room Standard	600 x 600 x 35	453	672	≥ 13320	≥ 3 X	≥ 16750	3550	3120
ST 1250	Computer Room Heavy Duty Standard	600 x 600 x 35	567	673	≥ 16650	≥ 3 X	≥ 19100	4440	3550
ST 1500	Extra heavy duty class 1	600 x 600 x 35	680	670	≥ 19980	≥ 3 X	≥ 21550	5550	4440
ST 2000	Extra heavy duty class 2	600 x 600 x 35	906	670	≥ 26640	≥ 3 X	≥ 26300	6660	5550
ST 2500	Extra heavy duty class 3	600 x 600 x 35	1150	670	≥ 33000	≥ 3 X	≥ 31100	8880	6660

Test report in accordance with (EN 10204 3.1) done at Sanas accredited SGS laboratories to specification (BS EN 12825:2001)

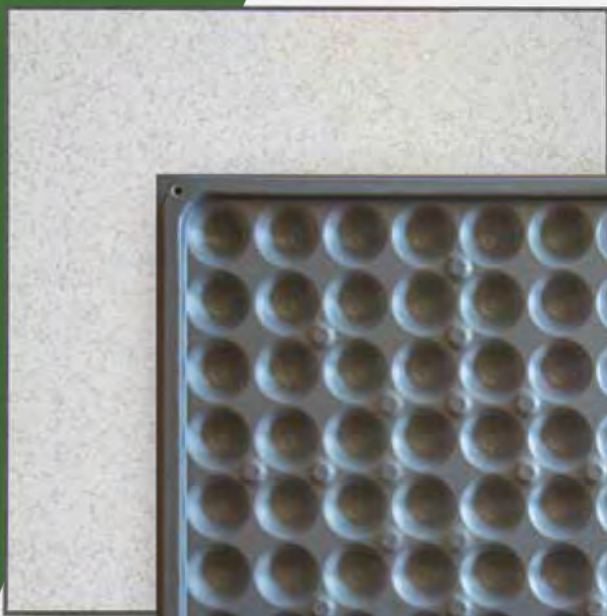
The product complies with EN10204 3.1 done at Sanas accredited SGS laboratories to Specification (BS EN 12825:2001) and as per Cisca recommended Test Procedures for Access Floors 2007.

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

ST SYSTEM

COMPONENT SPECIFICATION

The ST access floor panels 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 18 convex salient point structure and an international dome design. All these additional design features result in the higher dimensional precision and panel strength. 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 Positive Locating Hole (for free standing system)

Flexible and simple for both bare and Laminated systems without having to change pedestals. Enables a higher load capacity.

Salient Points Structure

18 Salient points providing better load capacity.

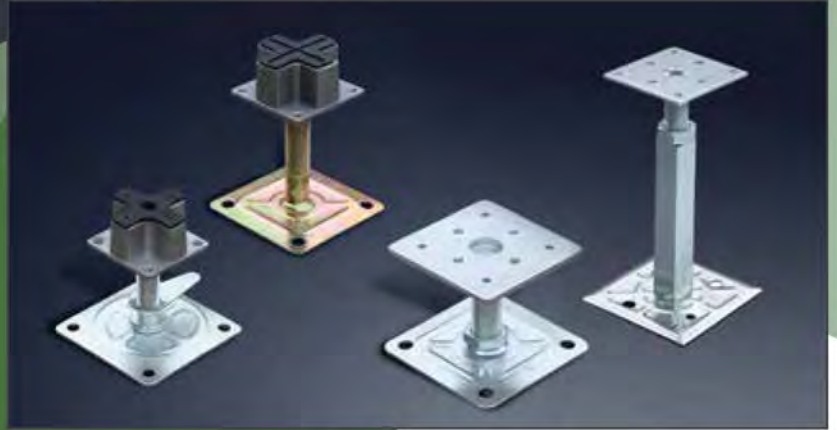
International Dome Design

More elegant appearance, higher dimensional precision and panel strength.



ST SYSTEM

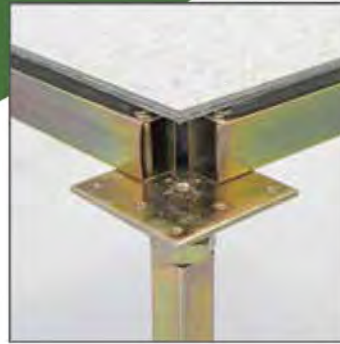
- A DUAL FUNCTION FREESTANDING & SNAP ON STRINGER SYSTEM
- A DUAL FUNCTION BOLT ON STRINGER & SCREW DOWN SYSTEM



**ST SYSTEM
FREESTANDING
SYSTEM**



**ST SYSTEM
SNAP-ON
STRINGER SYSTEM**



**ST SYSTEM
BOLT-ON
STRINGER SYSTEM**



**ST SYSTEM
SCREW-DOWN
SYSTEM**

The ST access flooring panels positively locate onto the aluminium head at all four corners. The aluminium head that the panels locate on to has a pvc gasket to reduce noise. The head is supported by a corrosive protected steel base. This option does not require screws and is fully functional without any screws.

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 aluminium 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.

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.

The ST 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. All fasteners may be removed without the loss of the floors lateral stability.

ST SYSTEM UNDER-STRUCTURE SYSTEM

The ST Under-Structure System is generic to the Freestanding 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 an aluminium die cast, factory assembled head and steel 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

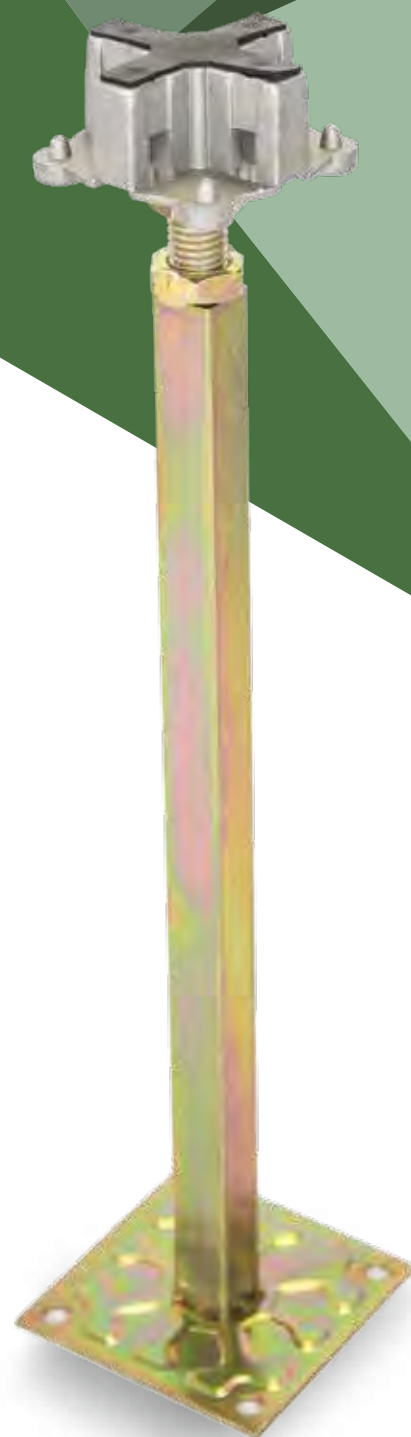
Pedestal	Ultimate Load (kN)
1	55.5
2	53.9
3	58.7
Average	56.0

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





ST SYSTEM

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.