



### Access Floor Performance Criteria:

#### TYPE 1, 2 & 3 MULTIFUNCTION / UNIVERSAL RAISED ACCESS FLOOR SYSTEM & TYPE 1,2 & 3 UNIVERSAL TYPE RAISED ACCESS FLOOR

- 1.1 The Type 1, 2 & 3 Multifunctional / Universal Freestanding, Screw Down and Bolt-on Stringer Raised Access Floor & the Type 1, 2 & 3 Universal Snap-on Stringer Raised Access Floor Systems:

The above Access Floor Systems proposed comply with SABS 1549:1993 Edition 1.1 as does the Type 1, 2 and 3 Universal Snap-on Stringer Raised Access Floor System.

These Raised Access Floor Systems are designed to last the lifetime of the building, the product is extremely flexible and directly suited to a banking head office type of environment.

With over 6.000.000,00 m2 in the market place, 90% of which is installed in high-churn commercial type of installations the product has proven itself many times over.

It must be noted that the Type 1, 2 & 3 Panels are manufactured in Asia but the under-structure is locally manufactured in Wynberg, Gauteng or in Asia.

The Panels are produced in Asia which in a factory which is Korea International Standards Certification KS A 9001:2000 / ISO 9001:2000 and ISO14001:2004 compliant.

- 1.2 All Products comply with and exceeds SABS 1549:1993 Edition 1.1.

## 2. APPLICATION

### 2.1 For General Office Applications, Meeting Centre, Designated Heavy Load Areas on Office Floors:

The Type 1, 2 & 3 Multifunction Freestanding, Screw-down and Bolt-on Stringer Raised Access Floor System & High Load Areas within the General Office Environment to accommodate Bulk Filing & Heavy Rolling Loads:

For all areas as described above from 100mm to 900mm we recommend the Type 1, 2 or 3 Multifunction Freestanding Raised Access Floor System.

At 900mm high there are some factory requirements that need to be met for the system to function correctly.

The main advantage to this system is that the system is multi-functional and positively locating. The positively locating under-structure with its extremely strong reinforced steel head and it's built in safety features are ideal for quick upgrades in a high-churn environment.

The panel locks into the under-structure, the holes in the pedestal head are tapped and thus the end-user can change from a free-standing system to a screw-down system or upgrade to a heavy duty bolt-on stringer system by simply adding screws or adding bolt-on stringers.

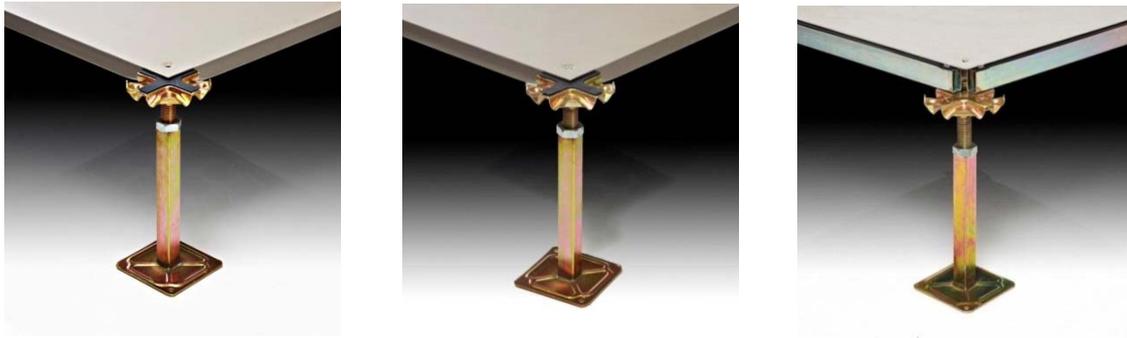
The freestanding system consists of a 600mm X 600mm steel cement filled panel installed on a multi-functional / universal Positively Locating Head supported by a plastic gasket placed on top of the head and the head placed and locked into the tube of the base to finish at the desired finish floor height.

With regard to heavy load areas on floors, we surmise that you are referring to increased load to accommodate Bulk filing, Tomax or Zippel units or heavy rolling loads.

BATES ACCESS FLOORING (PTY) LTD: CLASS A, B, C  
OR A TYPE 1, 2 OR 3 RAISED ACCESS FLOOR SYSTEM

We under these circumstances we again recommend the Multi-function / Universal System. The flexibility in the Multifunction system as a result of the system being not only a positive locating system but also a screw-down system and bolt-on stringer system, the system is designed to take the load of all three panel grades and is ideal for this application as zipline & tormax or bulk filing units are both a uniformly distributed load and a dynamic load. All the client has to do is change the panel over to the correct load/grade of panel and then insert the screws into the holes provided.

The screw will lock the panel firmly in place and this can all be done by in house personal and does not require an access floor contractor to come in and undertake the change as is required in other types of access floor systems.



Multifunction Freestanding System

Multifunction Screw-Down System

Multifunction Bolt-on stringer System

We must point out that this is the only multifunctional positively locating system capable of alternating between all three grades of panels and remain a freestanding system and allow for screw-fixing the panels in place.

- Type 1 Panel (600mm X 600mm) steel cement filled panel with a flat steel top sheet and a domed bottom pan in a linear domed formation.

*Dimensions: 599,7mm X 599,7mm X 35mm*

*Cement filled bare panel*

*Cold steel plate top sheet 0,80mm thick and bottom pan 0,8mm*

*Top steel plate SPCC grade*

*Bottom Steel Plate ST14 Grade*

*Epoxy Coated 80 um (Micron)*

- Type 2 Panel (600mm X 600mm) steel cement filled panel with a flat steel top sheet and a domed bottom pan in a linear formation.

*Dimensions: 599,7mm X 599,7mm X 35mm*

*Cement filled bare panel*

*Cold steel plate top sheet 0,80mm thick and bottom pan 1,0mm*

*Top steel plate SPCC grade*

*Bottom Steel Plate ST14 Grade*

*Epoxy Coated 80 um (Micron)*

BATES ACCESS FLOORING (PTY) LTD: CLASS A, B, C  
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- Type 3 Posilock Panel (600mm X 600mm) steel cement filled panel with a flat steel top sheet and a domed bottom pan in a linear formation.

*Dimensions: 599,7mm X 599,7mm X 35mm*

*Cement filled bare panel*

*Cold steel plate top sheet 1,20mm thick and bottom pan 1,00mm*

*Top steel plate SPCC grade*

*Bottom Steel Plate ST14 Grade*

*Epoxy Coated 80 um (Micron)*

- Multifunction positively locating head with anti-static plastic gasket and tapped holes to accommodate corner lock screws in for panels and tapped holes to accommodate screws for bolt-on stringers with re-enforcing plate Safety Plate

*Dimensions: Top and reinforcing/safety plate manufactured out of 1,50mm Steel galvanized Z275 zinc pasivated.*

*120mm X 19mm electro galvanised stud crimped as an additional safety feature.*

*Hot dipped galvanised lock nut with vibration proof safety feature.*

*M5 X 50mm Screws (for Bolt-on Stringer)*

*M6 X 43mm Screw (Cornerlock for fixing panels to heads)*

- Bolt-on Stringer for Type 1,2 & 3 Multifunction Access Floor System.

*31,75mm X 15,88mm Steel X 1,26mm External Dimension of steel*

*600mm in length with two punched holes for mechanical fixing to Posilock Multi-Function Head*

*Steel Thickness 0,8mm*

*Hot Dipped Galvanised*

*Takes 2 X M5 50mm Screws*

- Base 90 Finish Floor Height to 1500 Finish Floor Height (Base is universal and used for both the Multifunction Head & the Universal Head (Locally Manufactured)).

*Steel Base*

*102mm X 102mm X 1,60mm Base Plate*

*22,3mm X 22,3mm X 1,6mm Standard Grade Steel Tube - 1,5mm thick Imported Base*

*Electro Galvanised Zinc Pasivated*

*Punched Holes for Mechanical Fixing to concrete slab where require.*

All components are interchangeable and you simply modify or swap between the systems by adding or subtracting components.

The ability to change between all three grades of panels and screw-fix panels to improve lateral stability is all that is required and can all be done in house without calling in access floor subcontractors.

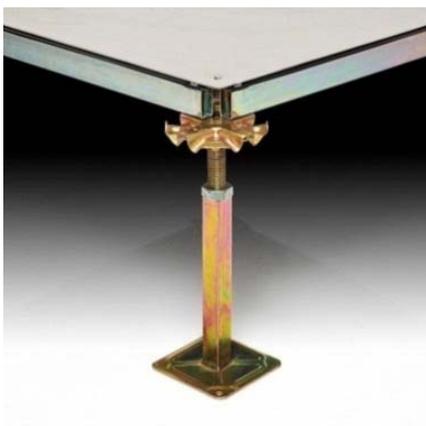
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We must point out that this is the only multifunctional Positively Locating System capable of alternating between all three grades of panels and screw-fixing the panels in place without changing the head.

A system for the main Computer centre, Network & Patch Rooms

Multi-functional Bolt-on Stringer Raised Access Floor System

- Our recommendation would be Type 1, 2 or 3 (dependent on Load requirements) Universal Snap-on Stringer Raised Access Floor System with a 1,50mm anti-static high-pressure laminate factory bonded to the access floor panel.
- This system is specifically designed for a computer room environment and has been successfully used in many computer room environments. The primary reason for our recommendation is that in computer rooms increased access is required to the floor void on a continuous basis and the increased lateral stability of a Snap-on stringer system will limit the amount of damage done to the floor by technicians, allow more panels to be opened and closed and provide increased lateral stability.
- Similar to that of the Multifunction System the Universal Snap-on Stringer System is truly versatile and all components are fully interchangeable.
- However in a computer or IT related environment the only changes you can make are changing the stringer from a Snap-on stringer to screw down stringer. Or the panel can be changed from one grade to another as the panel is covered with a 1,50mm anti-static high pressure laminate you cannot screw down the panel.



Multi-Function Bolt-Stringer System



1,50mm Anti-Static High Pressure Laminate with  
a bevelled or Integral Trim Edge

*0,8mm thick 20 gauge hot dipped galvanised.*

## BATES ACCESS FLOORING (PTY) LTD: CLASS A, B, C OR A TYPE 1, 2 OR 3 RAISED ACCESS FLOOR SYSTEM

- When opening and closing a Multi-Function / Universal free-standing floor at finish floor height from 90mm to 900mm you can open 5 panels and then leave one panel in place to ensure lateral stability is maintained.
- In an 900 finish floor height system we recommend that 4 panels be opened and one left in place for both of the above cases panels cannot be opened around a pedestal head as you will lose lateral stability.

This applies to both directions as long as the access floor grid's lateral stability is kept in place by leaving one panel in place to lock the system together. This only applies to positively locating access floor systems.

With regard to a Multifunctional Screw-down access floor system: The same applies **as per above the only difference being that in the Multifunctional screw-down system should to many screws be removed the floor will not lose its integrity/lateral stability as a result of the access floor panel positively locating onto the pedestal head.**

In order to maintain the system in a good condition we recommend that only an access flooring installer undertakes this operation during the construction period and then trains the in-house facilities personal to carry on in the future.

- In accordance with the manufacturer's instructions the pedestals are fixed to the concrete sub-floor with a Pekat 2 Part Polyurethane adhesive. This product is non-hazardous and has been tried and tested in installations totalling over 6.000.000 m2.

### The Flexibility of the Proposed System

Multifunction / Universal Freestanding, Screw-down & Bolt-On Stringer System:

**The flexibility in the Multifunction system as a result of the system being not only a positive locating system but also a screw-down system and bolt-on stringer system is designed to take the load of all three panel grades.**

**This system is ideal general high-churn office areas and for upgrading the floor to a heavier grade to accommodate heavier load areas such as bulk filing units which are both a uniformly distributed load and a dynamic load.**

**All the client has to do is change the panel over to the correct load/grade of panel and then insert the screws into the holes provided (The screw is only applicable for dynamic loads as it substitutes a stringer at a fraction of the cost and provides superior lateral stability).**

**The screw will lock the panel firmly in place and this can all be done by in house personal and does not require an access floor contractor to come in and undertake the change as is required in other types of access floor systems.**

**We must point out that this is the only multifunctional Positively Locating System capable of alternating between all three grades of panels and screw-fixing the panels in place without changing the head.**

### Green Building & Raised Access Flooring

#### Building Solutions Provide Key Environmental & Economic Benefits

- Improved indoor air quality
- Improved indoor air quality
- Improved thermal comfort for personal working in the office environment
- Increased energy efficiencies & increased thermal comfort
- Reduced operating costs and reduced churn costs
- Reduced waste in terms of materials & time
- Increased worker productivity
- Reduced natural resource consumption
- Increased use of daylight

### The Benefits of Raised Access Flooring

Raised Access Flooring Integrate the benefits of power, data, telecommunications and air distribution all of which offer economic benefits.

Using under-floor distribution services to create a green indoor environment will assist in a variety of needs that conventional construction cannot

Increased efficiency, with modular plug & play power and data wiring will provide the maximum flexibility allowing you to respond to equipment, without any changes to the environment, quickly and effectively and to a minimum of cost, time and effort.

Under floor HVAC systems not only eliminates most duct work and drop downs, thus reducing insulation, all associated with overhead systems.

### Incorporating Sustainability

- The Multifunction / Universal Raised Access Flooring provide the opportunity to economically, efficiently and in a timeous manner make changes to under-floor services and economically facilitate the high churn environment in the modern working environment. The raised Access Floor offers exceptional flexibility to the current and future occupants of the office environment in which it is installed.
- The ability to quickly and efficiently respond to changes in the environment, tenant turnover and a high churn environment where changes are cost minimal reducing labor costs, the use of additional materials resulting in energy, time and labor costs savings, while improving occupancy health comfort and productivity.

### Material & Resources

#### Building Re-Use

- The Universal / Multi-function Raised Access Flooring system are designed to last the life time of the building.
- Although an access floor will not help a project achieve credits immediately, it can significantly help to do so later in the buildings life. Demountable partitioning on top of raised access floors is easy to detach and erect elsewhere on the floor, electrical boxes and air diffusers can be moved to accommodate a new tenant fit out. A new environment may therefore only require the purchase of additional access floor components which can be purchased to complete new occupant fit-out requirements.

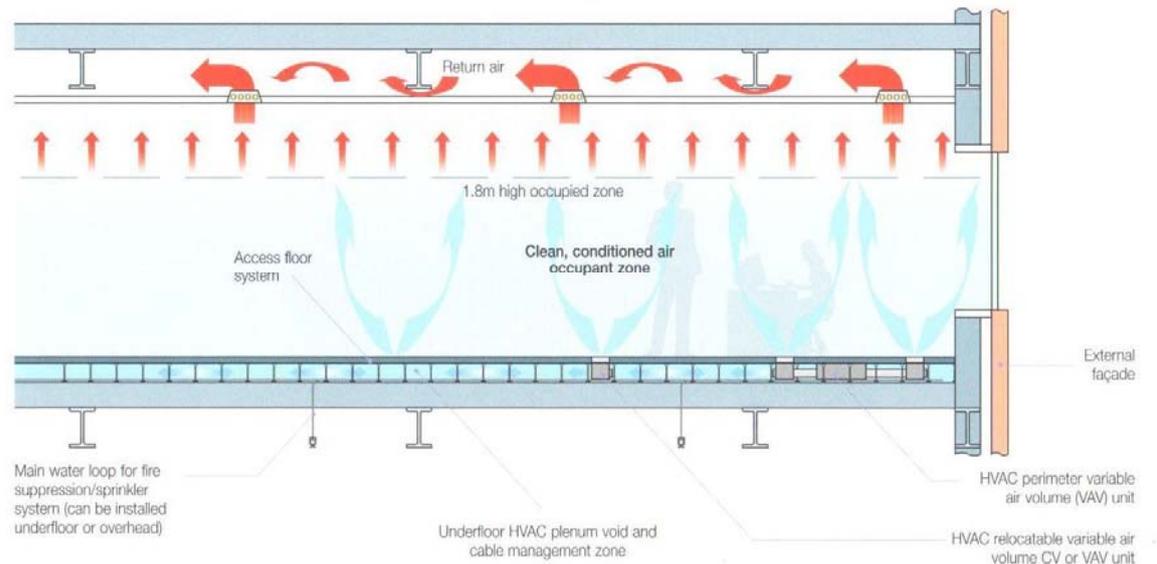
#### Material re-use

- Access Floor panels and understructure components can be uninstalled and relocated to a new site and re-installed. Be aware that just as the building re-use credit, the material re-use strategy will not likely help achieve points immediately. Rather, it is a long term sustainability strategy that a building can contribute towards

#### Recycled Content

- *The Raised Access Floor used in commercial offices consists of product 23, 5% Post-Consumer Recycled Content and a potential 23, 7% Post Industrial recycled content.*
- *The total recycled content is equal to 47, 2% with a local content of 24,22%*

### Raised Access Flooring & Creating Green Environments



### Conclusion

- The Multifunction / Universal Raised Access Flooring provide the opportunity to economically, efficiently and in a timeous manner make changes to under-floor services and economically facilitate the high churn environment in the modern working environment. The raised Access Floor offers exceptional flexibility to the current and future occupants of the office environment in which it is installed.
- The ability to quickly and efficiently respond to changes in the environment, tenant turnover and a high churn environment where changes are cost minimal reducing labor costs, the use of additional materials resulting in energy, time and labor costs savings, while improving occupancy health comfort and productivity.



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