

STACO[®]

Static Control Flooring System



Flooring for Modern Interiors

Actile series

AN45 series

Convention

anti-static vinyl tile

anti-static resilient access floor

concrete filled steel panel

HPL panel

wood core panel

www.net-floor.com

The STACO system is developed to provide full coverage and services in Netfloor product family. The Netfloor management team has contributed to the designing, developing and manufacturing of the STACO system. Along with the patent Actile series, the STACO product lines are manufactured through Netfloor strategic partnership ISO 9000 factories and are assured under our persisted product standard and unprecedented quality control system.

I. STACO ... Static Control Flooring System

Safety, comfortable and colorful flooring systems for the modern commercial and public interiors.

Actile series: Anti-Static Vinyl Tile

All purpose anti-static, resilient vinyl tile.

Available in 2 series:

1. **AT4.5 series:** Total thickness 4.5 mm
Size: 600 mm x 600 mm
2. **AT3.0 series:** Total thickness 3.0 mm
Size: 36" x 36" (914 mm x 914 mm)

AN45 series: Anti-Static Resilient Access Floor

Resilient, non-trimmer access panel for un-restricted color design

1. Anti-static: electrostatic propensity < 0.6 KV.
2. Resilient: topping with 4.5 mm thick Actile.
3. Durable: vinyl surface, much higher durability than HPL.
4. Easy Clean than carpet tile.
5. Vivid 8 colors for selection. No trimmer at border of the panel. This enables un-restricted color matching to the access floor.



The Actile AT4.5 series contributes non-trimmer bonding to access panel.

II. Conventional Access Floor

Conventional access floor systems of high concentration load and rolling load property.

FS-series: Concrete Filled Steel Panel

Concrete filled steel panel is the most popular traditional access floor in the world market. We provide the FS-series at wide range grades from light traffic to extra heavy loading.

HP-series: HPL panel

HP series is suitable to use in computer rooms, control rooms and factories.

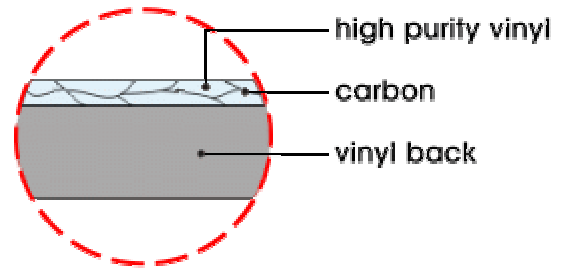
WC series: Wood Core Panel

WC series panels are popular in Europe and Middle East. We offer wood core panel in light to medium duty grades. And for wide selection of surface floor coverings.



Actile - Anti-Static Vinyl Tile

Actile is an ideal resilient flooring for the modern interiors. Electrostatic propensity of the tile is less than 0.6 kV. This has effectively eliminated the static irritation in the network office as well as in institutional public interiors. The tile consists of wear-layer and backing.



Wear-layer: high durability pure PVC with inlaid carbon.

Backing: cross-section construction multiple layers, which enhance dimensional stability of the tile.

Two series are available in the **Actile** system: **AT4.5** and **AT3.0**.

Actile AT4.5 series

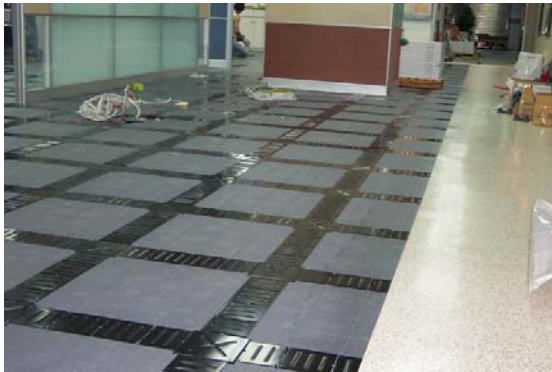
ideal solution better than carpet tile

..... 600 mm x 600 mm x 4.5 mm

1. As surface Flooring for Access Floors

Actile provides releasable solution same as carpet tile. In addition, **Actile** features with high durability, anti-static and easy clean which regular commercial carpet tile cannot match.

1.1 Apply on Low-Profile Access Floor



Actile to install on access floor before or after cable routing.

1.2 On Corner-Lock bare finish Access Floor: same application as 1.1

1.3 For access floor manufacturers to apply **one-to-one alignment bonding** to access panel. **Actile** is the only vinyl tile suitable for non-trimmer application on access panel. We supply **Actile** and support access floor manufacturers bonding techniques.



**** For details, please see page 5 and 6**

Actile, factory applied, one-to-one alignment bonding to access panel without trimmer, contributes free design to access floor
(1) monolithic atmosphere,
(2) non restriction color matching

2. Renovation on access floors ... *Effective Solution to Old Access Floor Surface Maintenance*

2.1 To replace old carpet tile on Low-Profile Access Floor (OA Floor)

When carpet tiles are dirty and/or start generating statics, **Actile** is correct replacement.

- Easy steps:**
- Remove the old carpet tile. Clean access floor surface.
 - Brush the old access floor surface with **releasable adhesive**, or apply **double-side tape**.
 - Install **Actile** same procedure as for regular vinyl tile installation.

Case A: renovation in a bank's credit card center (Actile on old OA Floor)



Remove old carpet tiles.
Brushing releasable adhesive.



Install **Actile** on access (OA) floor
same procedure as PVC tile.



Actile provides anti-static, easy
clean, quick renovation.

2.2 Renovation on Cable Management Access Floor

2.3 Renovation on Corner-Lock Access Floor

- Easy steps:**
- Remove old carpet tile.
 - Install **Actile** with double-side tape 180 or 120 cm o.c.
 - Entrance, border, aisle: generally applying releasable adhesive or 60 cm o.c. double-side tapes under tiles' joints.



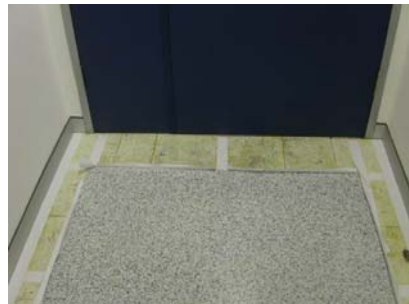
2.4 Renovation on HPL Access Floor

Case B: Renovation in a multi-nation bank in H.K

Access Floor: wood core HPL access floor panel installed a few years ago. But the HPL surface got scratched shortly after installation. And few trimmers started loosing.

First time renovation: carpet tiles were installed over all HPL panel. Again, carpet tiles got dirty quickly in few years. Other problem was statics started bothering the employee.

Workable solution this time: Now, **Actile** is the solution. The management decided to remove carpet tile and install **Actile** on the HPL access floor.



- Renovation at aisle:**
Install **Actile**, double-side tape 60 cm o.c. under **Actile**'s joints.
- Renovation in office:**
Install **Actile**, double-side tape 120 ~ 180 cm o.c. under **Actile**.

Actile AT3.0 series ...

for Hospital, School, Factory, Public Institutes ...

36" (914 mm) x 36" (914 mm) x 3.0 mm

As a modular flooring system specialist, we develop **Actile AT3.0** as a budgetary and efficient alternative to the roll-type sheet vinyl. AT3.0 features high durability and seamless surface same as roll-type sheet vinyl. Although **AT3.0** has more joints than sheet vinyl, it offers convenient handling, transportation and easy repair on the other hand. As a matter of fact, sub-floors (slab) are often not in good condition. When install sheet vinyl, to repair damage of defect area of is always a headache. In this event, **AT3.0** can be repaired by only replace a 3 feet x 3 feet tile without patching. So, following are why choose **AT3.0**.



1. Better coverage to floor irregularity than 2 mm thick sheet Vinyl.
2. Anti-static: electrostatic propensity less than 0.6 kV.
3. Static resistivity: $10^6 \sim 10^9 \Omega$.
4. In case of damage to the floors, AT3.0 can be repaired by taking off 1 piece tile, replace with a new one.
5. **AT3.0** size 3 feet x 3 feet: which enables easier and less costs during handling and transportation than sheet vinyl.



Performance comparison Actile AT3.0 vs. standard commercial roll-type sheet vinyl

Product	Total Thickness	Wear Layer	Durability	Electrostatic Propensity	Repair	Seamless Joints Distance	Transportation & Handling
Actile AT3.0 series	3.0 mm	1.0 mm	Excellent	< 0.6 KV	Easy	36" (914 mm)	Easy
Regular Roll-Type Com. Sheet Vinyl	2.0 mm	0.7 ~ 2.0 mm	Excellent	1~ 3 KV	Difficult	2000 mm	Difficult

Performance chart - AT4.5 & AT3.0

Product	Size	Total Thickness	Wear-Layer Thickness	PVC Back Thickness	Static Resistivity	Taber Wear Test - Loss	Fire Index	Chemical Resistance
AT4.5	60 x 60 cm	4.5 mm	1.0 mm	3.5 mm	$10^6 \sim 10^9 \Omega$	< 0.01 mm	Class 1	No Change
AT3.0	36" x 36"	3.0 mm	1.0 mm	2.0 mm	$10^6 \sim 10^9 \Omega$	< 0.01 mm	Class 1	No Change

** Colors: 8 standard colors. Special run min 500 sq. meters per color

** AT4.5 available in size 24" x 24"

** AT5.0 for special run (total thickness 5.0 mm with wear layer 1.5 mm plus backing 3.5 mm)

The concurrent access floor systems available in the marketplace are function-oriented. **STACO AN45** series is developed to change the stereotype image to traditional access floor. The vinyl topping access floor currently available in the market is 2 mm thick vinyl, without anti-static treatment and must have trimmers at borders of the tile. This has met requirement on surface durability, resilience and acoustics. However, the trimmers may be losing few years later and need constant maintenance. From viewpoint of aesthetics, the trimmers (mostly black and 5 mm deep) bonded at four sides of each panel has greatly limited design for monolithic feeling or color matching on the floors. **AN45** is the solution. It offers better product functions and in the meantime, aesthetic selection as an access floor.

Features

- Uniform finish: Full piece Actile bonded one-to-one alignment on access panel. The 4.5 mm thick Actile firmly support borders of the tile, no trimmers are needed. Panels are inter-changeable, providing uniform looking as well as un-restricted color coordination and matching.
- Anti-static property: static resistance at $10^6 \sim 10^9 \Omega$.
- Resilient: Access floor panel surfaced with Actile. Quiet and comfortable.
- Hard-wearing: Pure vinyl wear-layer 1.0 mm thick, much more durable than HPL.
- Choice of energized colors: 8 standard colors.
- Easy maintenance: Gloss surface, easy clean, maintenance procedure are easy. Clean, rinse with clean water, waxing only use water-base wax.
- Non-combustible: steel cementitious panel, galvanized steel pedestals and bolted stringers.



AN45 panel consists of **Actile** as surface floor and the access panel

Surface: **Actile** 4.5 mm thickness.

Factory applied one-to-one bonding to the access panel. Actile border shall be averagely 2 mm outstrip the access panel's border. This enables best seams between the **AN45** panels.

Access panel: concrete filled steel panel of required loading property ranging concentrate load 1000 LB ~ 2000 LB.

Actile: anti-static vinyl tile.

Total thickness: 4.5 mm.

Wear Layer: 1.0 mm thick homogeneous vinyl.

Backing: 3.5 mm thick PVC back.

(for details of **Actile**, please see page 2)

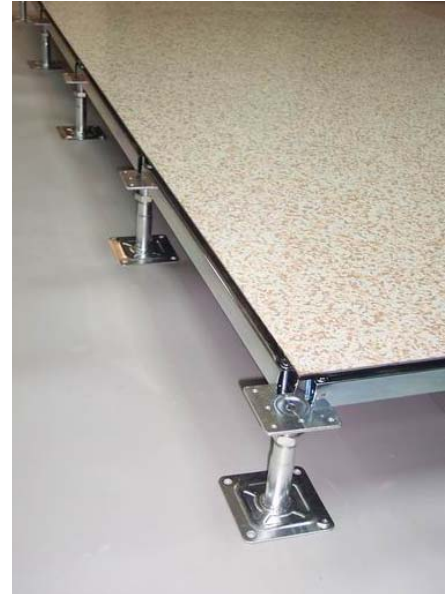
Size: 600 mm x 600 mm

(also available 24" x 24")

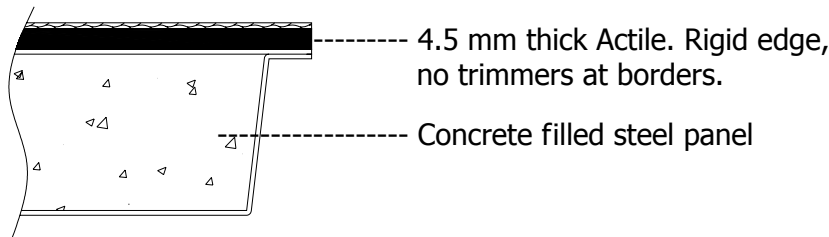
Access Panel: light-weight cementitious steel panel.

Size: 600 mm x 600 mm (nominal)

also available 24" x 24" (nominal)



AN45 Panel - cross section



Stringer:

Galvanized steel tube stringer. Galvanized screw bolted to upper plate of pedestal. Shock-absorption PVC stripe taped on top. Eliminate noise and prevent air leakage.

Pedestal:

(FFH 80 mm ~ 600 mm), Galvanized steel. Square base plate glued to the sub-floor.

Installation: Installation procedure of AN45 is same as standard access floor. The steel grid system may be provided by local access floor contractor. Top of the stringer shall be taped with shock absorption strip.

AN45 specifications

Panel size: 600 mm x 600 mm x 39.5 mm

System	Vinyl Tile Thickness	Anti-Static Wear-Layer	Static Resistivity	Concentration Load -- Access Panel	Understructure	FFH	System Weight Per Sq. Meter
AN45-1000	4.5 mm	1.0 mm	$10^6 \sim 10^9 \Omega$	1000 LB (4.41 kN)	Bolted Stringer	90 mm ~ 600 mm	Avg. 53 kg /m ²
AN45-1250	4.5 mm	1.0 mm	$10^6 \sim 10^9 \Omega$	1250 LB (5.51 kN)	Bolted Stringer	90 mm ~ 600 mm	Avg. 56 kg /m ²
AN45-1500	4.5 mm	1.0 mm	$10^6 \sim 10^9 \Omega$	1500 LB (6.61 kN)	Bolted Stringer	90 mm ~ 600 mm	Avg. 59 kg /m ²
AN45-2000	4.5 mm	1.0 mm	$10^6 \sim 10^9 \Omega$	2000 LB (8.81 kN)	Bolted Stringer	90 mm ~ 600 mm	Avg. 62 kg /m ²

FS series is a bare finish conventional access floor system. FS series provides high concentration load and rolling load property. The access floor system shall be surfaced with Actile, or commercial rate carpet tile, or commercial rate vinyl tile of greater than 4.0 mm thickness.

Access Panel

Construction: Welded steel panels in-filled with light-weight cement, corrosion resistance by powder painting.

Loading Property: Available in concentration load of 1000 LB, 1250 LB, 1500 LB and 2000 LB.

Panel size: 600 mm x 600 mm and 24" x 24"

Panel Thickness: 35 mm.

Process of cement in-filling: Cement in-filled strictly in accordance with the in-filling sequence procedure and curing setting time.

Coating: Corrosion resistance powder coating minimum 0.5 mm thick.

Installation: Pedestal and grid systems are available for Corner Lock or bolted Stringer.

Corner Lock: Installed with Corner Lock Pedestal.
Finish floor height from 80 mm up to 800 mm high.

Bolted Stringer: Installed with Bolted Stringer and Pedestal.
Finish floor height from 80 mm up to 1200 mm high.

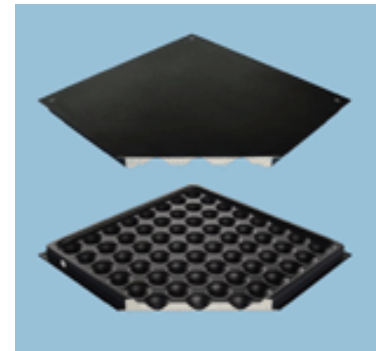


Surface flooring recommended on top of BP system

Netfloor Actile: 4.5 mm thick anti-static vinyl tile.

Commercial grade vinyl tile: More than 4.0 mm thickness.

Commercial rated carpet tile : Reputable brands such as Milliken, Interface, Heuga, Burmatex, Toly and etc.



Under-floor air diffusion

FS system accommodates under-floor air diffusion at minimum height of 300 mm. The air diffusion panel is available and shall be provided per architectural specs.

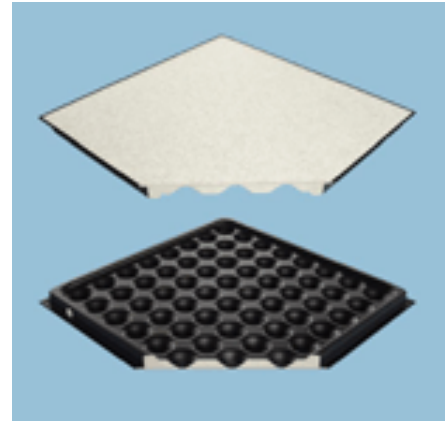
System	Applications	Concentration Load	Concentration Ultimate Load	Rolling Load 10 pass	Rolling Load 10000 pass
FS-1000	Light duty	1000 LB (4.41 kN)	> 2750 LB	800 LB (3.53 kN)	600 LB (2.64 kN)
FS-1250	Medium Duty	1250 LB (5.51 kN)	> 3437 LB	1000 LB (4.41 kN)	800 LB (3.53 kN)
FS-1500	Heavy duty	1500 LB (6.61 kN)	> 4125 LB	1250 LB (5.51 kN)	1000 LB (4.41 kN)
FS-2000	Heavy duty	2000 LB (8.81 kN)	> 5550 LB	1500 LB (6.61 kN)	1200 LB (5.29 kN)

** Test in accordance with CISCA

HP series

Concrete Filled Steel with HPL

HPL surfaced access floors are the most commonly using access flooring in the computer room, production or control rooms, those interior environment of light traffic and required and clean. The HPL finished panel as surface flooring is not recommended to use at high or medium traffic areas such as office, school, or public areas where there are frequent pedestrian walking, abrasion by shoes, chair casters and carts which will scratch and wear out the lamination surfaces.



HP series Access Panel

Panel size: 610 mm x 610 mm

Thickness of HPL: 1.2 mm or 1.6 mm

Thickness of Access Panel: 36.2 mm (plus 1.2 mm HPL)
36.6 mm (plus 1.6 mm HPL)

Loading property: Available in concentration load of 800 LB, 1000 LB, 1250 LB, 1500 LB and 2000 LB.

Static Control

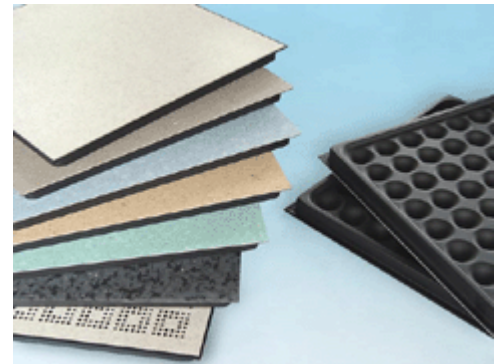
The systems are available in anti-static and conductive.

Antistatic / Static Dissipative HP Access Floor Panel

Static resistance at $1.0 \times 10^6 \sim 1.0 \times 10^{10} \Omega$

Conductive HP Access Floor Panel

Static resistance at $2.5 \times 10^4 \sim 1.0 \times 10^6 \Omega$



Colors

Available in selected ranges of colors.

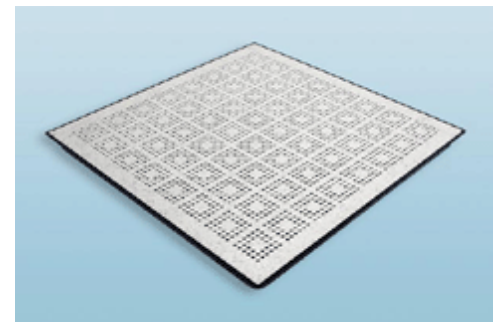
Vinyl Trim or Trimless

Factory assembled vinyl trim provides protection to borders of the HPL panel.

Also available for trimless HP panel. In the event of using trimless HP access panel, transportation and installation of the trimless HP access panels requires extra care, to prevent from damage to the border or angle of the HPL.

Perforated Panel for under-floor air diffusion

- Perforated panels provide optimum airflow without turbulence.
- Chamfered perforations provide up to 20% airflow rate.



Perforated Panel

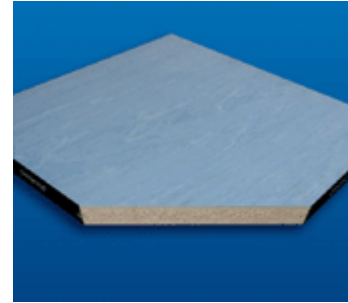
HP series accommodates under-floor air conditioning at minimum height of 300 mm. The air diffusion panel is available and shall be provided as specified by the architect.

WC series

Wood Core Panel

WC series are available in light to medium loading grade. Wood core panels are manufacturing by Netfloor strategic alliance ISO 9000 manufacturer. We supply the high density quality particle panel particular for South East Asia, India, Middle East and Europe.

Comparing to concrete steel panel, WC series panel is low-budgetary and light-weight. We supply WC series at bare panel as well as wide range surface floor coverings.



Bare Panel

38 mm thick particle panel.

Top and bottom are encapsulated with galvanized steel plate or insulated by aluminum plate.

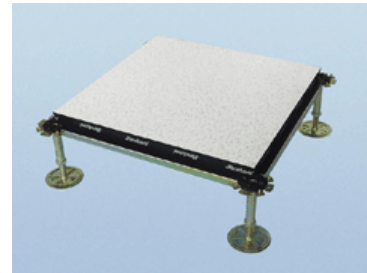
.. Black PVC strip bonding along four sides of panel.

Laminated

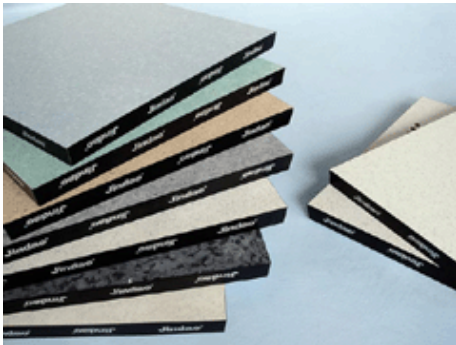
wide range surface floor coverings.

.. Factory applied panels:

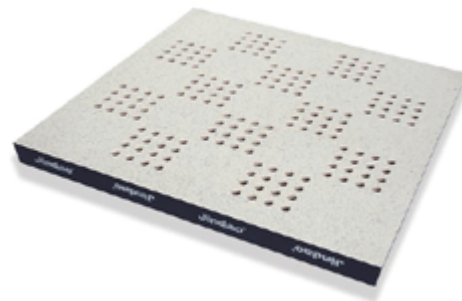
- HPL
- Vinyl tile
- Linoleum
- Rubber tile
- Ceramic tile



Border of the panel are trimmed with black PVC strip bonding along four sides of panel.



Wide range floor covering selection



WC series

Panel size: 600 mm x 600 mm x 38.0 mm

System	Applications	Concentration Load	Concentration Ultimate Load	Fire Retard	Understructure	FFH
WC-1000	Light duty	1000 LB (4.41 kN)	> 1700 LB	Class "0"	Bolted Stringer	To 900 mm
					Free Standing	To 450 mm
WC-1250	Medium Duty	1250 LB (5.51 kN)	> 2125 LB	Class "0"	Bolted Stringer	To 900 mm
					Free Standing	To 450 mm

Understructure systems

Corner Lock

Pedestals:

Pedestals to be fixed at corners of the Bare Panel.

Pedestal structure: Galvanized steel.

Height: Pedestals are available in different heights to accommodate floor finished from 80 mm to 800 mm high. Each pedestal allow + / - 20 ~ 25 mm height adjustment.



PERFORMANCE SELECTION CHART Corner Lock Pedestal for Bare Panel						
Pedestal No.	Pedestal Height (mm)	Horizontal Load (kg)	Vertical Load (18 kN)	Pedestal Head	Pedestal Tube	Pedestal Base
CL-PDT 80 ~ 250	80 ~ 250 + / - 20	50	Did Not Collapse	85 mm x 85 mm Cruciform	Φ 20 mm x 2.0 mm thick	100 mm x 100 mm x 2.5 mm Thick
CL-PDT 300 ~ 450	300 ~ 450 + / - 25	50	Did Not Collapse	85 mm x 85 mm Cruciform	Φ 24 mm x 2.0 mm thick	100 mm x 100 mm x 2.5 mm Thick
CL-PDT 500 ~ 800	500 ~ 800 + / - 25	50	Did Not Collapse	85 mm x 85 mm Cruciform	Φ 31 mm x 2.5 mm thick	125 mm x 125 mm x 4.0 mm Thick

Bolted Stringer

Stringer: Square tube, galvanized steel. Pre-punched holes at two end of the stringer, fastened at top plate of pedestal, automatically form a standard square grid.

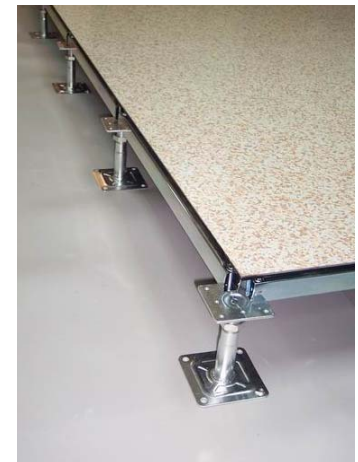
Shock Absorption (PVC taped):

PVC strip taped on top of the stringer.

To provide shock absorption and noise dampness.

Height: Pedestals are available in different heights to accommodate floor finish from 80 mm to 1200 mm high.

Each pedestal allow + / - 20 ~ 25 mm height adjustment.



PERFORMANCE SELECTION CHART Bolted Stringer & Pedestal for Access Panel						
Pedestal No.	Pedestal Height (mm)	Horizontal Load (kg)	Vertical Load (18 kN)	Pedestal Head	Pedestal Tube	Pedestal Base
BS-PDT 80 ~ 400	80 ~ 400 + / - 20	50	Did Not Collapse	85 mm x 85 mm x 4mm Flat	Φ 24 mm x 2.0 mm thick	100 mm x 100 mm x 2.5 mm Thick
BS-PDT 450 ~ 800	450 ~ 800 + / - 25	50	Did Not Collapse	85 mm x 85 mm x 4mm Flat	Φ 31 mm x 2.5 mm thick	125 mm x 125 mm x 4.5 mm Thick
BS-PDT 850 ~ 1200	850 ~ 1200 + / - 25	50	Did Not Collapse	85 mm x 85 mm x 4mm Flat	Φ 31 mm x 2.5 mm thick	150 mm x 150 mm x 5.0 mm Thick

STACO[®]

Static Control Flooring System



STACO AN45 non-trimmer access panel - monolithic view

Quality Assurance: All Netfloor product lines are quality assured and 5 years limited warranty.

Maintenance

Anti-static vinyl tile: Maintain in accordance with conductive floor procedure. Clean the dirt and rinse with clean water. Do not use oil-base wax. Water base wax is applicable.

Access Floor Stringer and pedestal:

Periodical maintenance shall be made according to access floor maintenance guide.

Patent granted -- **Actile**

China: Utility Model No. 200320124457.0

Taiwan: Invention Patent No. M247627

In pursuing quality improvement, the manufacturer reserves the right to vary specifications without prior notice.

serve all modern interiors

- School
- Bank
- Library
- Control Room
- General Office
- Factory / Factory Office
- Museum
- Hospital / Clinic



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