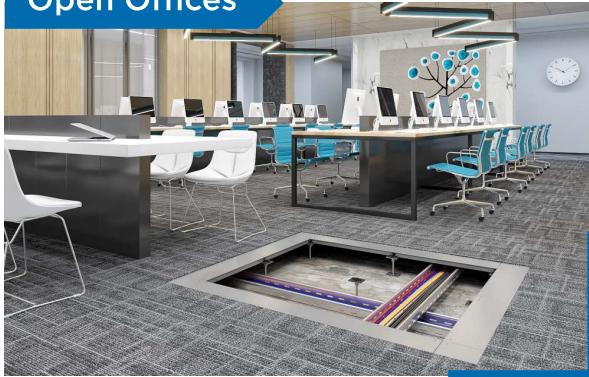


Applications of Raised Access Floor System

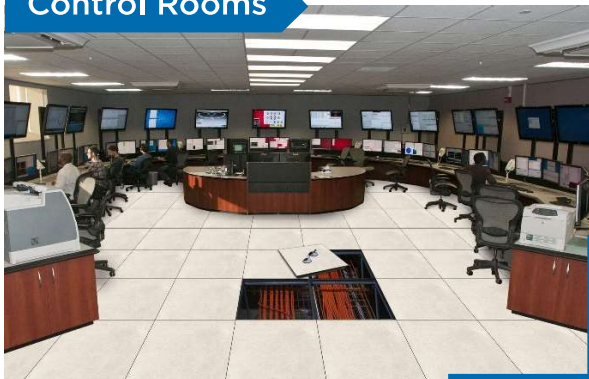
Open Offices



Data Centers



Control Rooms



External Spaces



Education



Casinos



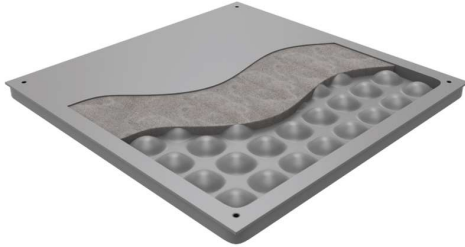
Other Applications:



Research Labs | Training Rooms | Switch Rooms | Server / Hub Rooms |
Communication Rooms | Hotels | Hospitals | Libraries | Auditoriums | Conveyor Belts
Mezzanines and many more...

PRODUCTS - Steel Cementitious Panel

UNIFOLD PANEL (UFP)

Now footsteps won't disturb your work!



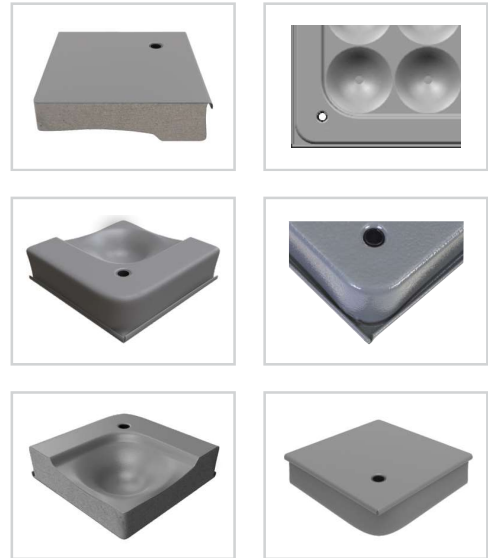
-  Non-combustible
-  Coated with Electrostatic Epoxy paint

- Dimensions:** 600mm x 600mm
- Panel Thickness:** 30 mm | 35 mm
- Top:** Flat steel
- Bottom:** Flat steel uniquely designed to form hemispherical reinforcing pockets
- Core:** Lightweight proprietary cementitious mixture

The uniqueness of this panel design are the engineered folded edges along the perimeter of the panel, which eliminates damage to the panel edges. Its wider beam width not only enhances the load carrying performance of the system but also provides a squeak free floor.

DESIGN FEATURES

- ◆ Unique folded flange design increases edge strength.
- ◆ Wider and stronger beam increases footprint area on the pedestal head and boosts the panel's structural performance and stability.
- ◆ Engineered countersunk feature enhances panel support & eliminates overlapping of panels.



BENEFITS

- ◆ Guaranteed no squeaking sound.
- ◆ Reduces risk of material damage & ensures personal safety to on-site workers.
- ◆ Perfectly aligned water leveled floor.
- ◆ Reduces manpower and improves speed of construction for the allied agencies as few panels can be gravity laid.
- ◆ Eliminates reworking and straightening of the edges post installation due to the folded flange panel technology.

System Selection Guide

Grade	UFP 1650	UFP 2250
Concentrated Load kgs (lbf)	360 (800)	450 (1000)
Ultimate concentrated Load kgs (lbf)	1080 (2400)	1350 (3000)
Uniform Distributed Load kgs / sq mt (lbf / sq ft)	1650 (340)	2250 (464)
Rolling Load* kgs (lbf)	180 (400)	225 (500)

* Contact us for detailed specifications of the product design.

Understructure Support System: Corner Lock



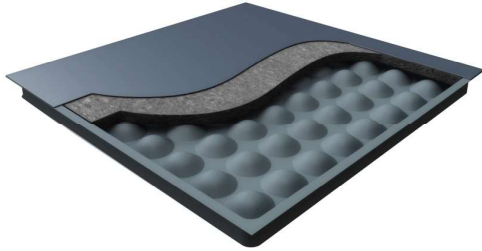
Each floor panel is mechanically secured to the pedestal head at all four corners ensuring maximum rigidity and lateral stability. Access to the sub-floor is very simply achieved by releasing the fasteners and lifting the panel.

Finished Floor Height:

Minimum: 65 mm
Maximum: 2000 mm

PRODUCTS - Steel Cementitious Panel

LOW FLANGE WIDTH (LFW)



-  Non-combustible
-  Coated with Electrostatic Epoxy paint

Dimensions: 600mm x 600mm | 600mm x 800mm
Panel Thickness: 30 mm | 35 mm
Top: Flat steel
Bottom: Flat steel uniquely designed to form hemispherical reinforcing pockets
Core: Lightweight proprietary cementitious mixture

The cantilever edges of the panel are reduced and this unique product design enhances the technical performance of the system, reduces the risk of damage at site and aims to provide tremendous advantages to the user.

DESIGN FEATURES

- ◆ Increased footprint area improves load carrying performance.
- ◆ Reduced & low cantilever edge provides higher strength to unsupported edge and reduces risk of damage.
- ◆ Wider beam increases overall stability of the system.
- ◆ Box Stringer design and corner edge support improves lateral rigidity of grid.
- ◆ Perfectly leveled floor due to panels being snug fit and bedding free design.

System Selection Guide

Grade	USF 800	USF 1000	USF 1250	USF 1500	USF 2000	USF 2500
Concentrated Load kgs (lbf)	363 (800)	454 (1000)	567 (1250)	680 (1500)	907 (2000)	1134 (2500)
Ultimate concentrated Load kgs (lbf)	907 (2000)	1134 (2500)	1418 (3125)	1701 (3750)	1814 (4000)	2268 (5000)
Uniform Distributed Load kgs / sq mt (lbf / sq ft)	1650 (338)	2025 (415)	2450 (502)	3100 (636)	3600 (738)	4000 (820)
Rolling Load* kgs (lbf)	180 (397)	225 (496)	281 (619)	315 (694)	425 (937)	525 (1157)

* Contact us for detailed specifications of the product design.

Understructure Support System: Corner Lock

Corner Lock System



Each floor panel is mechanically secured to the pedestal head at all four corners ensuring maximum rigidity and lateral stability. Access to the sub-floor is very simply achieved by releasing the fasteners and lifting the panel.

Finished Floor Height:

Minimum: 65 mm
Maximum: 2000 mm

Understructure Support System: ESRG

Edge Support Rigid Grid System



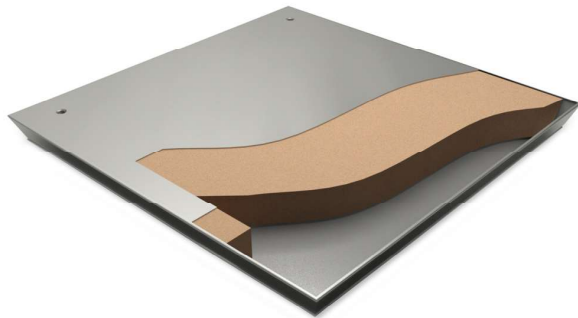
Edge support understructure provides maximum floor stability. It reduces all lateral movements and also ensures integrity of the floor on removal of panels for access to services in the sub-floor. Stringers are mechanically fastened to the pedestal head and panels are then placed on the grid formed. This system is ideal for high finished floor heights.

Finished Floor Height:

Minimum: 150 mm
Maximum: 2000 mm

PRODUCTS - Chipboard Panel

CHIPBOARD ENCAPSULATED PANEL (UWC)



Dimensions: 600mm x 600mm
Panel Thickness: 27 mm | 31 mm
Top: Galvanized Iron Sheet
Bottom: Galvanized Iron Sheet
Core: High density E1 grade chipboard core

This double folded lock constructs into a panel that has a unique in-built stringer at the underside of each panel edge.

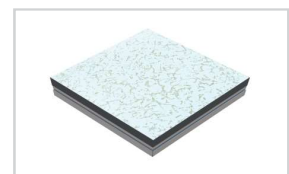
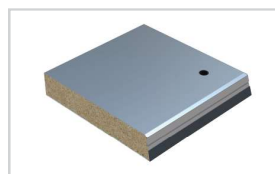
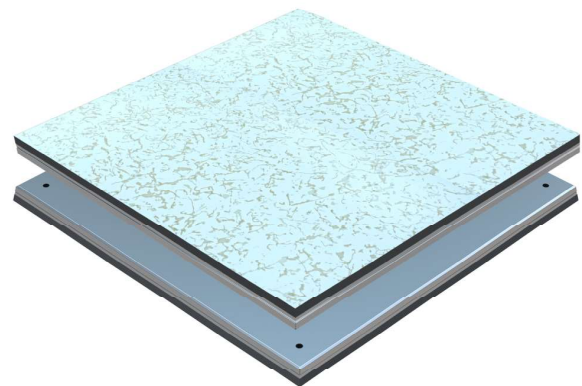
This unique engineering exhibits fine dimensional tolerances for modular control, accurate alignment of grids & inter-changeability of panels that complies with the Euro Class requirement of EN 12825.

Unitile's Wood core product range is made from chipboard particles which are extracted from well managed forests, controlled sources or recycled wood of fibre.

This post consumer recycled chipboard particles not only prevent the cutting of trees required for manufacturing of such wood related products but also prevents them from going to near capacity landfill sites.

DESIGN FEATURES

- ◆ High strength to weight performance.
- ◆ Unique inbuilt stringer design.
- ◆ Recyclable & environment friendly system.
- ◆ Good acoustical properties.
- ◆ Enhanced lateral stability, flexural stiffness & mechanical resistance.
- ◆ Precision in floor levels and positive alignment with the understructure system.
- ◆ Equipotential reinforcement for electrical continuity.



PRODUCTS - Chipboard Panel

System Selection Guide

Structural Performance as per BSEN 12825		27 mm	31 mm
Classification	Deflection	Concentrated Load kgs (KN)	Concentrated Load kgs (KN)
Class A	2.5 mm	544 / 5.34	595 / 5.83
Class B	3.0 mm	608 / 5.96	645 / 6.33
Class C	4.0 mm	726 / 7.12	774 / 7.59
Ultimate Concentrated Load		1678 Kgs / 16.45 KN	1728 Kgs / 16.94 KN
Uniformly Distributed Load Kgs / sq mtr.		1400 Kgs / sq mtr.	1600 Kgs / sq mtr.
Pedestal Axial Load Test		22 KN (2245 kgs) Axial Load per pedestal	22 KN (2245 kgs) Axial Load per pedestal

* Contact us for detailed specifications of the product design.

Understructure Support System: Corner Lock



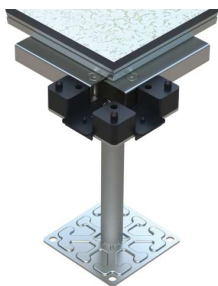
Corner Lock System

This system is suitable for the widest variety of office applications. Each floor panel is mechanically secured to the pedestal head at all four corners ensuring maximum rigidity and lateral stability. Access to the sub-floor is simply achieved by releasing the fasteners and lifting the panel.

Finished Floor Height:

Minimum: 150 mm
Maximum: 2000 mm

Understructure Support System: ESGR



Edge Support Rigid Grid System

Edge support under-structure provides maximum floor stability. It reduces all lateral movements and also ensures integrity of the floor on removal of panels for access to services in the sub-floor. Stringers are mechanically fastened to the pedestal head and panels are then placed on the grid formed. This system is ideal for high finished floor heights.

Finished Floor Height:

Minimum: 150 mm
Maximum: 2000 mm

PRODUCTS - Chipboard Panel

CHIPBOARD NON-ENCAPSULATED PANEL (UCB)

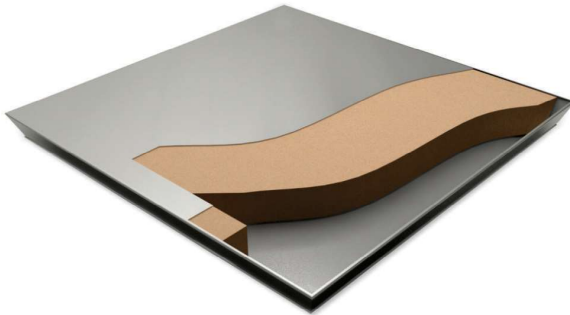
Dimensions: 600mm x 600mm
600mm x 800mm

Panel Thickness: 30 mm | 35 mm

Top: Galvanized Iron Sheet, Aluminium, High Pressure Laminate and Conductive Polyvinyl Chloride

Bottom: Galvanized Iron Sheet and Aluminium

Core: High density E1 grade chipboard core

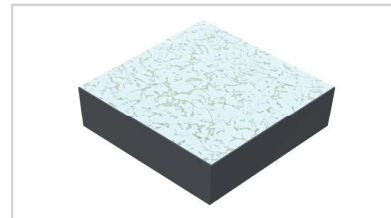
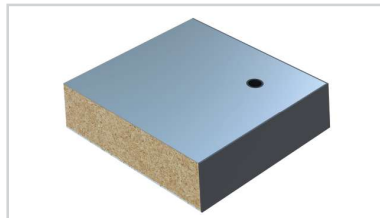
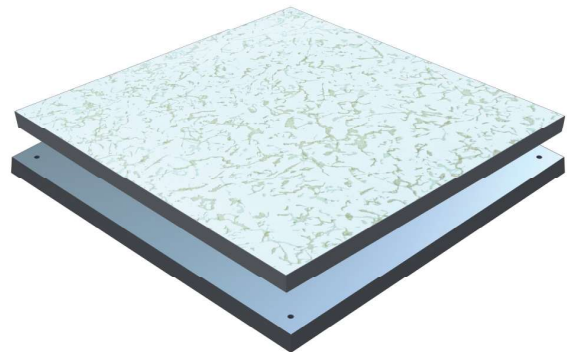


Unitile Chip Board Access Floor consists of engineered 600 mm square modular panels constructed around a high density E1 grade chipboard core. The system fully complies with the Euro Class requirement of EN 12825.

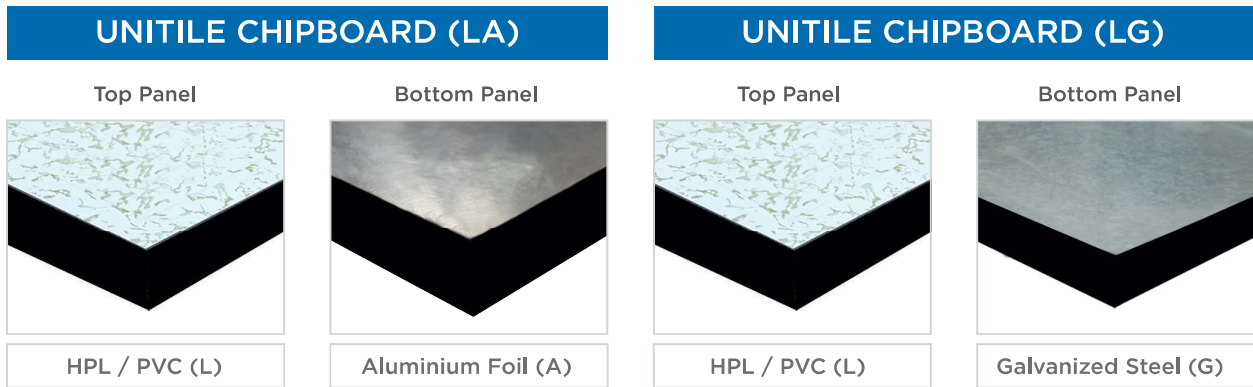
The base and the top surface of the core is factory bonded using an appropriate combination of surface finishes such as Aluminium, Galvanized sheet steel, High Pressure Laminate etc. The surface coverings are trimmed to ensure fine dimensional control, accurate alignment of grids and inter-changeability of panels. A full depth ABS edge band provides total encapsulation of the chipboard core and also protects the edge of the surface covering to prevent ingress of moisture. Electrical continuity is maintained through the top and bottom surface of the panel on to the pedestal head through conductive gasket. This ensures positive positioning and location of the floor panel on to the understructure system.

DESIGN FEATURES

- ◆ High strength to weight performance.
- ◆ Unique inbuilt stringer design.
- ◆ Recyclable & Environment friendly system.
- ◆ Good Acoustical Properties.
- ◆ Enhanced lateral stability, flexural stiffness & mechanical resistance.
- ◆ Precision in floor levels and positive alignment with the understructure system.
- ◆ Equipotential reinforcement for electrical continuity.



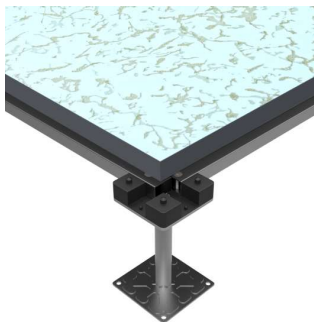
PRODUCTS - Chipboard Panel



System Selection Guide			
Structural Performance as per BSEN 12825		30 mm	35 mm
Classification	Deflection	Concentrated Load kgs (kN)	Concentrated Load kgs (kN)
Class A	2.5 mm	450 / 4.41	525 / 5.15
Class B	3.0 mm	550 / 5.39	600 / 5.88
Class C	4.0 mm	630 / 6.17	720 / 7.05
Ultimate Concentrated Load		1420 Kgs / 13.92 kN	1650 Kgs / 16.18 kN
Uniformly Distributed Load / Sq mtr. (As per PSA MOB PF2 PS)		918 Kgs	1377 Kgs
Pedestal Axial Load Test		22 kN (2245 kgs) Axial Load per pedestal	22 kN (2245 kgs) Axial Load per pedestal

* Contact us for detailed specifications of the product design.

Understructure Support System: ESGR



Edge Support Rigid Grid System

Edge support under-structure provides maximum floor stability. It reduces all lateral movements and also ensures integrity of the floor on removal of panels for access to services in the sub-floor. Stringers are mechanically fastened to the pedestal head and panels are then placed on the grid formed. This system is ideal for high finished floor heights.

Finished Floor Height:

Minimum: 150 mm
Maximum: 2000 mm

PRODUCTS - Calcium Sulphate Panel

UNITILE CALCIUM SULPHATE (UCS)

Dimensions: 600mm x 600mm
Panel Thickness: 30 mm | 34 mm
Top: Galvanized Iron Sheet / Anti Static High Pressure Laminate Static Dissipative / Conductive Vinyl
Bottom: Galvanized Iron Sheet
Core: Natural gypsum of high density over 1600 kgs /mtr³



Unitile Calcium Sulphate access flooring system is manufactured from fibre reinforced Calcium Sulphate which forms the core of the panel. Non-combustible high quality alpha-hemihydrate single pressed gypsum and non-toxic unbleached cellulose fibers are used as reinforcing material.

The base & top surface of the core is factory bonded using an appropriate combination of surface finishes such as Aluminum, Galvanized sheet steel, High Pressure Laminate etc. The edges of the panel are protected with a PVC edge band. The system offers an excellent acoustical sound deadening value.

DESIGN FEATURES

◆ Acoustic Characteristics:

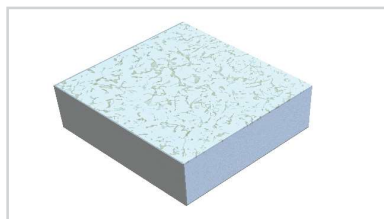
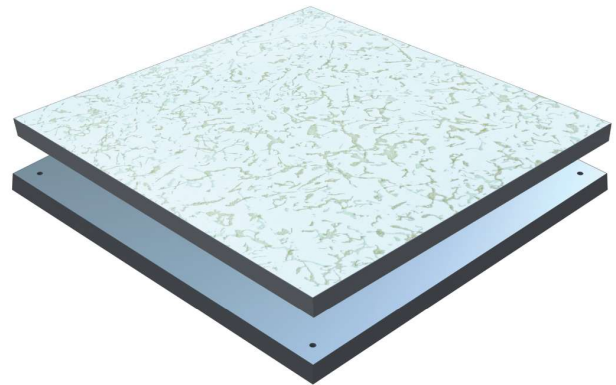
The material structure, design features, and high precision production of the access floor panels provide excellent acoustic values. The great walking properties offer a high degree of comfort and create the perfect working environment.

◆ Electrostatic Characteristics:

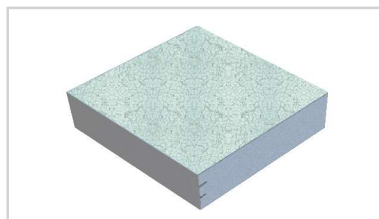
Electrostatic charges are dissipated, regardless of panel material, by the inherent design features. The ohmic resistance defined in this way allows grounding compliance in accordance with VDE 0100 using suitable floor coverings.

◆ Ecology:

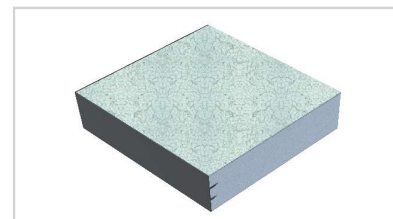
Due to the environment-friendly production process, and the use of ecologically safe materials, 90 to 97% of the calcium sulphate panels can be recycled at the end of their life – a very important ecological consideration today.



Regular PVC Edge band



Profile PVC Edge band



Aluminium Edge band

PRODUCTS - Calcium Sulphate Panel

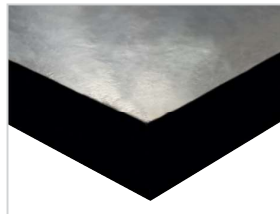
UNITILE CALCIUM SULPHATE (LA)

Top Panel



HPL / PVC (L)

Bottom Panel



Aluminium Foil (A)

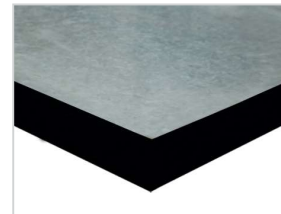
UNITILE CALCIUM SULPHATE (LG)

Top Panel



HPL / PVC (L)

Bottom Panel



Galvanized Steel (G)

System Selection Guide

Structural Performance as per BSEN 12825	34 mm
Concentrated Load	625 Kgs (6.12 kN)
Ultimate Concentrated Load	1250 Kgs / 12.25 kN
Uniformly Distributed Load (As per PSA MOB PF 2 PS/ CISCA)	1875 Kgs / m ²
Stringer Load	102 Kgs (225 lbf)
Pedestal Axial Load Test	22 kN
Pedestal Over Turning Moment Test	113 N x Meters

*Contact us for detailed specifications of the product design.

Understructure Support System: Gravity Lay



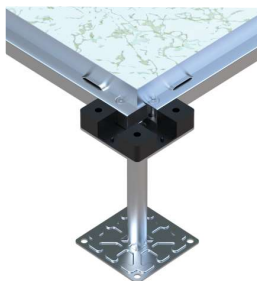
Substructure in Galvanized Steel

Model: Free Standing
Adjustment mm: +/-25

Finished Floor Height:

Minimum: 150 mm | Maximum: 300 mm

Understructure Support System: ESRG



Substructure in Galvanized Steel with support & stringers for substructure height of over 300mm

Model: ESRG
Adjustment mm: +/-25

Finished Floor Height:

Minimum: 150 mm | Maximum: 2000 mm

Unitile All-Weather Pedestal

Raised Access Flooring Systems for evolving external spaces.



The Unitile All Weather Pedestal has been designed and engineered for use in conjunction with outdoor tiles (Natural Stone/Ceramic Marbles/Concrete Paver Blocks/Vitrified tiles) to create raised floors in external spaces. The pedestals create a void between the concrete slab and the outdoor tiles that accommodates and conceals services and also offers easy and cost-effective access for maintenance when required. The open gaps between the outdoor tiles allow the water to drain off into the cavity created under the panels. This solution allows for any underlying elements to be inspected and offers a practical passage for pipes.

Unitile All Weather Pedestal is geared towards giving the specifier not just a product that meets and exceeds the required specification, but technical and on-site support that ensures the installation proceeds on specification, on time and on budget.

BENEFITS

- ◆ Height range fully adjustable from 17 to 850mm.
- ◆ High loading supports loads in excess of 1000 kg per pedestal.
- ◆ Services running in cavity below can be easily accessed.
- ◆ Patented slope corrector can create or compensate for up to 5% pitch.
- ◆ Water control system allows for simple, fast removal of rainwater via access cavity.
- ◆ Sustainable pedestals manufactured from 78% recycled PPC and are 100% recyclable.
- ◆ Configurable Pedestal spacing options allow for all complex layouts, abutments, penetrations and edge details. All positions are lockable by special patented key.
- ◆ Allows for positive drainage & air ventilation.
- ◆ Reduces sound transmission & increases temperature insulation.
- ◆ Ability to conceal services (i.e. plumbing, electrical etc).
- ◆ Quick & easy installation.
- ◆ Reduces weight loading by eliminating sand & cement mortar beds.

FEATURES

- ◆ Made from 5mm thick 80% recycled polypropylene
- ◆ 2, 3, 4.5, 6, 8 & 10mm Paver Spacer Tabs
- ◆ Adjustable heights from 17mm to 1070mm
- ◆ UV stable & chemical resistant
- ◆ Provision for mechanical fixing if required
- ◆ Inbuilt safety locking mechanism
- ◆ Millimetric adjustment



Applications:

Poolside Decking | Outdoor Gardens | Terraces | Fountains | Swimming Pools

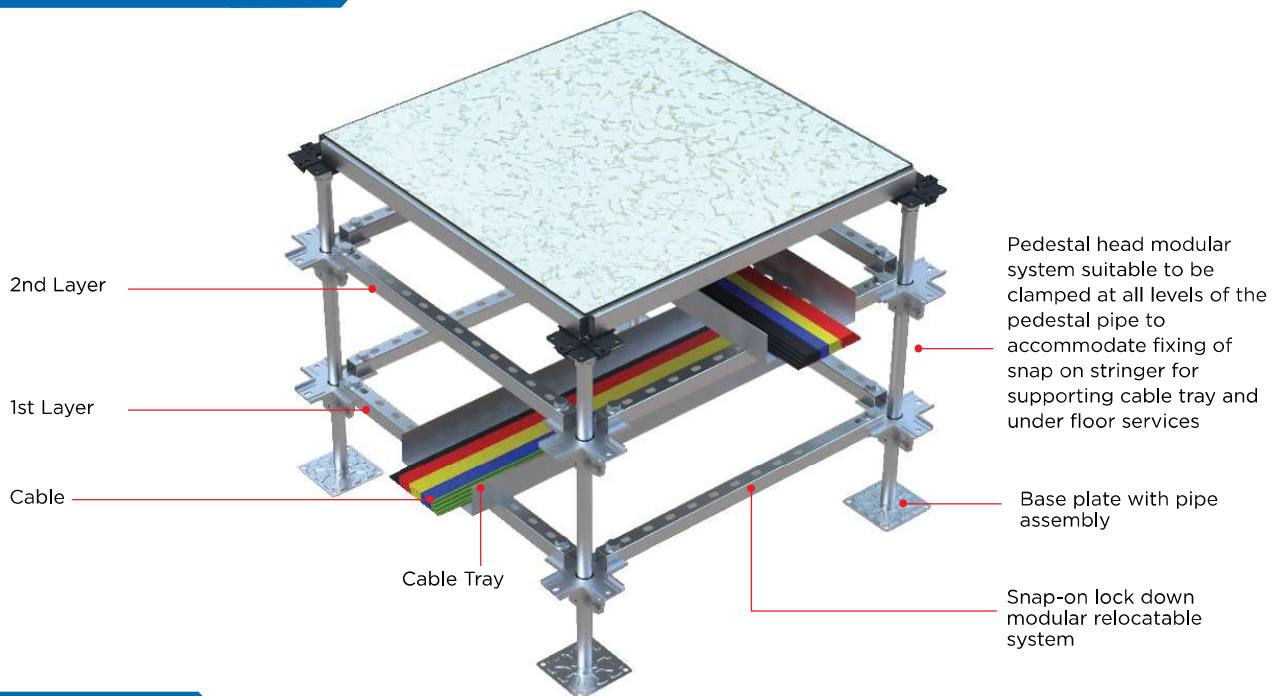
Multilayer Underfloor Cable Tray Support System

Conventional Cable Tray systems are grouted on the floor which requires drilling of the slabs resulting in dust generation and poses more risk to high tension slabs. The cables can come in contact with floor water/dampness risking the safety of cables and rusting of the brackets and cable trays. The pedestals can foul with the cable tray which leads to floor instability and unorganized cable routing system. The overall system is rigid and has challenges with the stability of the floor.

Multilayer Underfloor Cable Tray Support System is an engineered under grid cable tray support system made with heavy grade slotted angles along with special head for snap on easy installation.

The grid is available in different finishes like hot dipped galvanized and powder coated.

DESIGN FEATURES



BENEFITS

FULLY MODULAR SYSTEM:

Special head for snap on easy installation and heavy grade slotted angles enable:

- ◆ Last minute changes since this grid is flexible and can be installed anywhere as per the site requirement.
- ◆ Accommodation of multiple tiers of cable trays as per site requirement.
- ◆ Onsite adjustable cable tray heights for the user to make changes at site when other services need to run below the floor for example water and gas lines if any.

INTEGRATION WITH THE RAISED FLOOR SYSTEM IMPROVES SPEED OF INSTALLATION:

- ◆ Since this system is completely modular, if the Raised Access Floor installation is done along with the Under floor Cable Tray System then the entire system will require minimum alignments procedures. This is because the placement of the grid is fixed hence a default installation of 600mm center to center (c/c) placement is achieved.
- ◆ The cable tray support system is also ready along with it, hence this reduces the coordination time and sequence of working with the electrical contractor (which they generally do pre-installation of raised floor and then open floor panels to install the cable trays).

HIGHER STABILITY & LATERAL SUPPORT:

A seismic compliant raised floor system requires one tier of cable grid throughout the false floor area:

- ◆ Since this system is interconnected with all the pedestals, the entire false floor will behave as a single grid enabling seismic support.
- ◆ This system indirectly maintains the accuracy of the raised floor grid ensuring the panel fitment & alignment remains intact at all times. It ensures a proper hold of the center to center distances between the pedestals.
- ◆ Without any compromise on the rigidity, the new system design allows the pedestal base to be glued on the subfloor instead of conventional method of anchoring using fastener. This avoids the drilling process and generation of dust in your facility.

ELEVATED CABLE TRAY FEATURE:

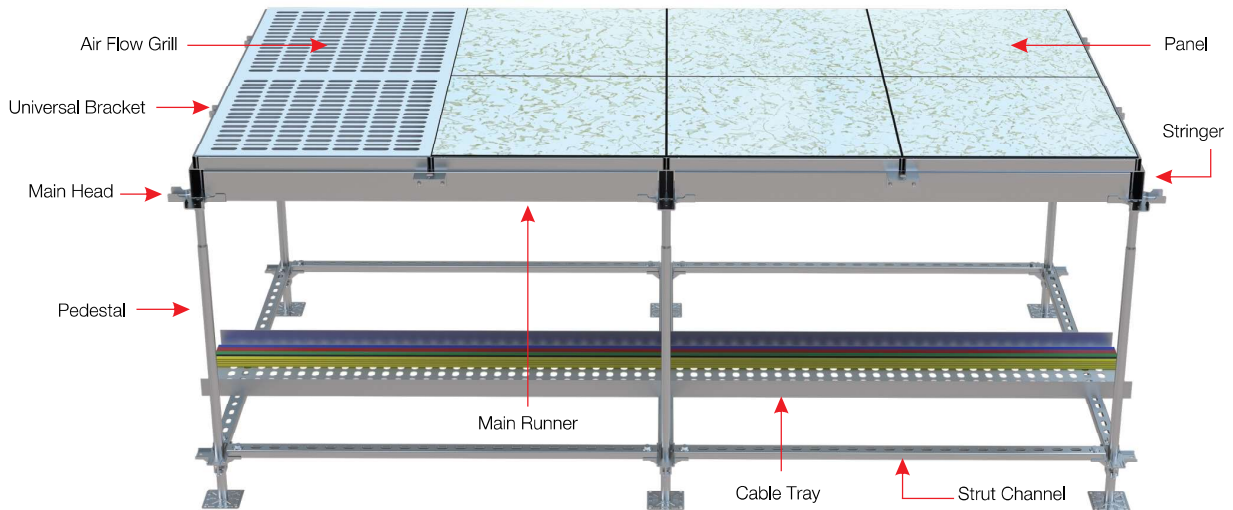
- ◆ Prevents the contact of the cables and trays with floor water / dampness.
- ◆ Prevents fouling of cable tray with pedestal.
- ◆ Supports the contractor for doing a neat and clean installation as the path for cable trays is predefined.

Nex-Gen Raised Access Floor System

Unitile has re-engineered the conventional raised floor system design to overcome the challenges faced in the Data Centers and Control Room environments.

Our all new Nex-Gen access floor system has been designed to provide a wider span for cable management during the construction and ease of maintenance post-handover of your facility!

DESIGN FEATURES



**This system is compatible with steel cementitious and calcium sulphate panels.*

BENEFITS

- 01** A 1200 mm wide plenum space below the floor enables convenience of cable routing.
- 02** Lesser obstruction to larger services running below the floor (above 500 mm).
- 03** The wider span prevents fouling of cable tray systems with the pedestals.
- 04** Ease of maintenance during construction program.
- 05** Ease of maintenance post-handover for the life cycle of your facility.
- 06** Faster installations at site due to fewer number of pedestals.