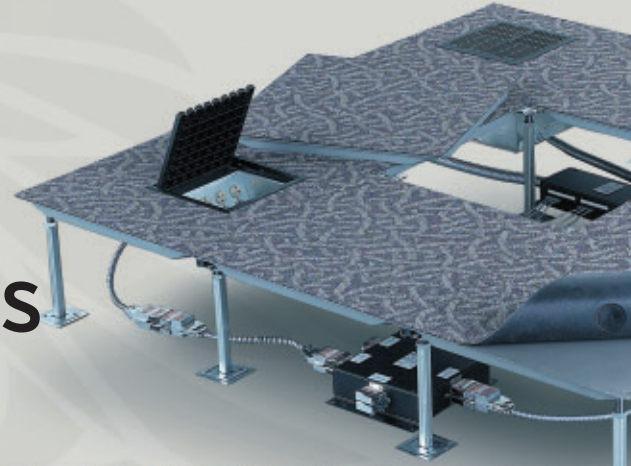


Access Floor Solutions

Product Guide



*Access Flooring
to the Power of* **Tate**[®]



Owner Occupied Office: Union Pacific Headquarters, Omaha, Nebraska, 880,000 ft²



Developer/Multi-Tenant: Linden Associates, Arundel Mills Corporate Park, Hanover, MD, 110,000 ft²

Tate Access Floors, Inc.

Access flooring and underfloor service distribution have emerged as practical solutions for the construction of commercial buildings. The distribution of HVAC, electrical power, voice and data cabling and other utility services underneath an accessible, flexible, modular floor offers enhanced cost-efficiency, time savings, flexibility and sustainability.

Tate Access Floors, Inc. has been designing and manufacturing access floor systems to provide underfloor service distribution solutions for more than 40 years - with over 420 million ft² of access floor installed throughout the world.

Tate's underfloor service distribution solution provides:

- Access Floors that offer complete accessibility to critical services at any location on the floor plate
- Underfloor modular 'plug & play' power and communications/data solutions that deliver optimum flexibility and reconfiguration capability.
- Underfloor HVAC solutions that are cost effective and deliver improved indoor air quality (IAQ), personal comfort, and lower energy consumption.
- Best Practice Design and Benchmarking tools for designing lower cost building construction.
- Sustainable building products and methods that provide LEED™ credits for supporting Green Building design.



Green & Sustainable: Premier Automotive Group, Irvine, CA, 253,000 ft²



Federal Government: Ronald Reagan Building, Washington, D.C., 1,200,000 ft²

Headquartered in Jessup, Maryland, Tate is a member of the Kingspan Group, a global manufacturer of building products based in Ireland. Our combined facilities throughout Europe and in the US make us the world leader in the access floor industry.

Tate is committed to US manufacture and continues to invest heavily in its Maryland and Pennsylvania facilities. With the continued addition of new technology and capacity, we ensure our ability to respond to our customer's needs quickly and efficiently delivering on-time shipment of material at a rate needed to support installation.



Tate Access Floors, Inc. components are proudly made in the U.S.A.

“Tate is confident our experience brings significant value to your project”

Technical Resources: Design & Resource Support

Tate offers a variety of avenues to access our unsurpassed technical assistance and support from design through construction completion. Draw upon our unmatched breadth of experience using one or more of our valuable resources.

'Tate Technical Hotline'

Dial 800.231.7788 to consult directly with our engineers.



Masterspec

As a subscriber, Tate uses the AIA 'Product Masterspec' document to generate access floor specs for you that are identical in format to other product specs in the AIA master specification system.

Best Practice Design & Specification Guide

A comprehensive resource for architects and specifiers complete with full product details, architectural drawings and specifications in CSI format.



Interactive Cost Model

Use this tool to create customized cost comparisons of conventional overhead service distribution versus access floor and underfloor services. Contact us for a demonstration.



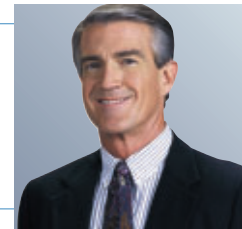
On-Site Education

AIA continuing education credits are available through on-site underfloor service distribution presentations by Tate professionals.



Dealer Network

Tate's worldwide team of dealers will assist you with your building needs. Find a dealer in your area using the 'Dealer Locator' at www.tateaccessfloors.com.



Green & Sustainable Building

As a member of the US Green Building Council, Tate participates in supporting the goals of creating a healthy environment. Contact a Tate professional to find out how underfloor service distribution contributes to achieving points in three of the five rating categories that will LEED™-certify your building.



Comprehensive Website

Find everything you need from detailed product information, technical support documentation and specifications to industry links, project case studies and more at www.tateaccessfloors.com.



Visit www.tateaccessfloors.com or call the **Technical Services Team** at 800.231.7788.



Courthouse: E. Barrett Prettyman Courthouse,
Washington D.C., MD, 120,000 ft²

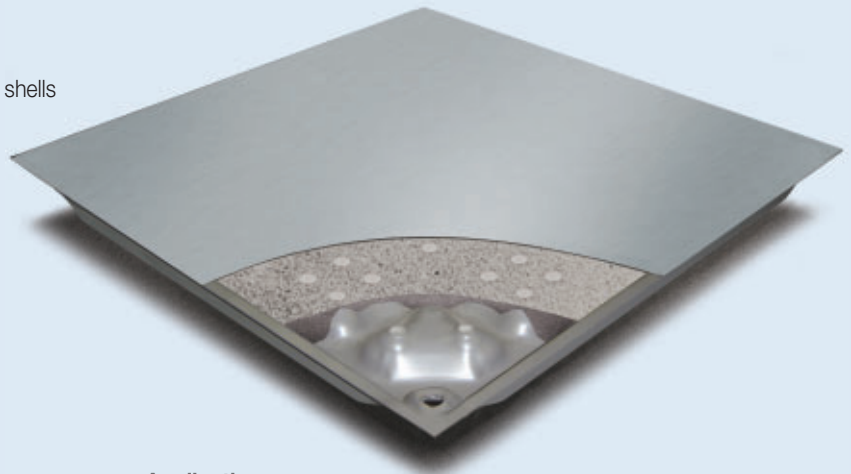


Higher Education:
Harvard School of Public Health,
Boston, Massachusetts,
40,000 ft²



ConCore® Panels

Concore Access Floor panels are epoxy coated unitized shells consisting of a flat steel top sheet welded to a formed steel bottom sheet filled with a highly controlled mixture of lightweight cement. Manufactured to exacting tolerances, these non-combustible rigid, solid panels deliver the ultimate in strength, durability, and acoustic performance.



Panel Features

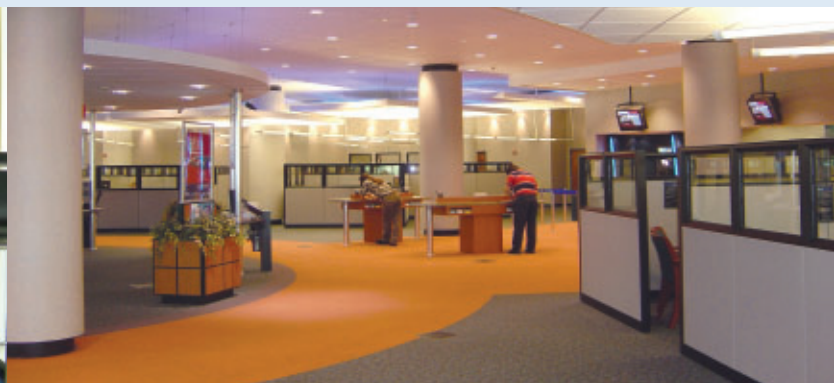
- Engineered panel corner for positive engagement
- Full range of factory or field applied finishes
- Excellent rolling and ultimate load performance
- Completely non-combustible
- Interchangeable panel strengths
- Available in 24" and 60cm sizes

Applications

With five standard load performance grades and an extensive selection of understructure supports and floor finishes, these panels are suitable for a wide range of applications from typical office applications to classroom/training facilities, libraries, courthouses, casinos, data centers, and even light industrial applications.



Higher Education: Fedex Emerging Technology Complex, Memphis, Tennessee, 60,000 ft²



Owner Occupied Office: Redstone Federal Credit Union, Huntsville, Alabama, 66,000 ft²

ConCore® Performance Selection Chart

System Type		System Weight (lbs/ft ²)	Static Loads			Rolling Loads (lbs)		Impact Loads (lbs)
Panel	Understructure		Concentrated Loads (lbs)	Uniform Loads (lbs/ft ²)	Ultimate Loads (lbs)	10 Passes	10,000 Passes	
ConCore® 1000	PosiLock™	7.5	1000	250	3250	800	600	150
ConCore® 1250	PosiLock™	8.5	1250	300	3750	1000	800	150
ConCore® 1000	Bolted Stringer	9.0	1000	250	3000	800	600	150
ConCore® 1250	Bolted Stringer	10.0	1250	300	3500	1000	800	150
ConCore® 1500	Bolted Stringer	10.5	1500	375	5000	1250	1000	150
ConCore® 2000	Bolted Stringer	11.5	2000	500	5750	1500	1250	150
ConCore® 2500	Bolted Stringer	12.0	2500	625	6000	1500	2000	150

For further information and product details and specifications, call the Tate Technical Hotline at 1-800-231-7788, or visit www.tateaccessfloors.com and click on Designer/Builder Resources.

All Steel Panels

All Steel Panels

All Steel Access Floor panels are epoxy coated unitized shells consisting of a flat steel top sheet welded to a formed steel bottom sheet. Manufactured to exacting tolerances, these non-combustible rigid, solid panels deliver the ultimate in strength and durability with the convenience of lightweight construction.



Panel Features

- Lightweight for ease of handling
- Excellent grounding and electrical continuity
- Full range of factory applied finishes
- Completely non-combustible
- Interchangeable with Concore, Perforated, and Grate panels
- Available in 24" and 60cm sizes

Applications

With three standard load performance grades and complete interchangeability with Concore, Perforated and Grate airflow panels, these panels coupled with an extensive selection of understructure supports and floor finishes are suitable for a wide range of applications from typical data/computer centers to telecommunication rooms, mission critical facilities, electronic assembly areas, and general purpose equipment applications.



Mission Critical Facilities

All Steel Performance Selection Chart

System Type		System Weight (lbs/ft ²)	Static Loads			Rolling Loads (lbs)		Impact Loads (lbs)
Panel	Understructure		Concentrated Loads (lbs)	Uniform Loads (lbs/ft ²)	Ultimate Loads (lbs)	10 Passes	10,000 Passes	
All Steel 1000	Bolted Stringer	6.0	1000	250	2750	400	400	150
All Steel 1250	Bolted Stringer	7.0	1250	300	3800	500	500	150
All Steel 1500	Bolted Stringer	8.5	1500	375	5000	600	600	150

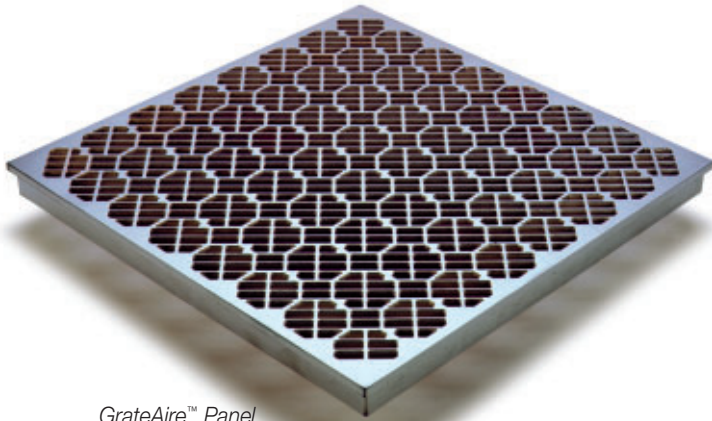
For further information and product details and specifications, call the Tate Technical Hotline at 1-800-231-7788, or visit www.tateaccessfloors.com and click on Designer/Builder Resources.

Air Flow Panel Floor Systems

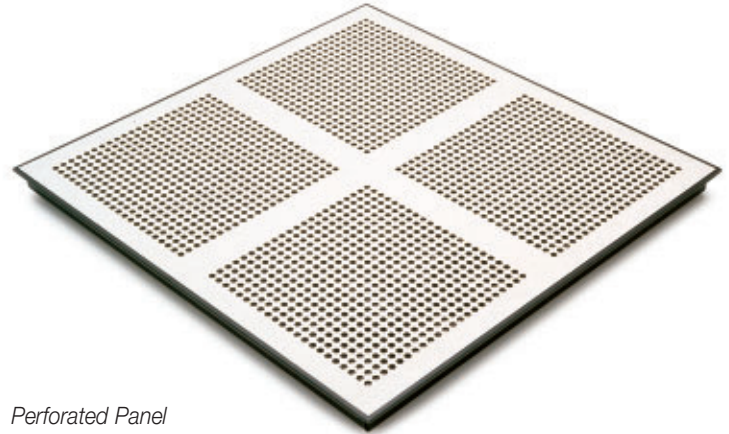
GrateAire™ & Perforated Panels

Panel Features

- Perforated steel panels and GrateAire™ aluminum panels are compatible with ConCore® and All Steel panels in bolted stringer systems.
- GrateAire™ die-cast aluminum panels have 56% unobstructed open area and rolling load capacity equal to that of ConCore® 1250 panels (1000 lbs/800 lbs).
- All panels are available with top surface adjustable dampers.
- Steel perforated panels are available with High Pressure Laminate, vinyl and rubber floor coverings.
- GrateAire™ aluminum panels are available with an unpainted textured surface or epoxy powder coatings.

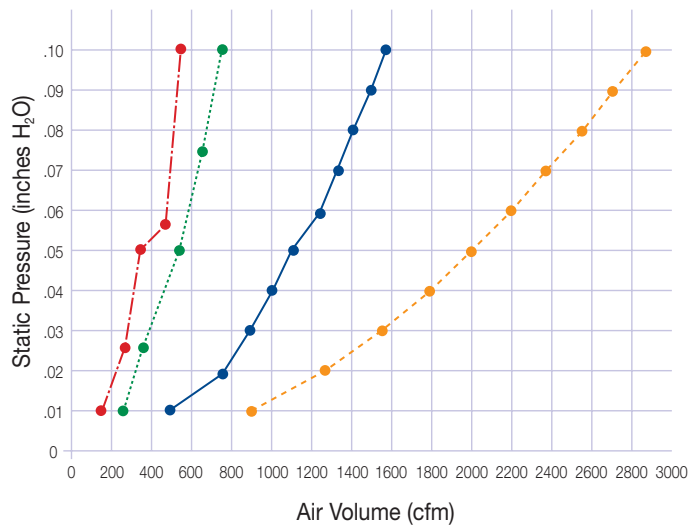


GrateAire™ Panel
(with 56% open area)



Perforated Panel
(with 25% open area)

GrateAire™ and Perforated Panel Air Flow



- Perforated panel with damper
- Perforated panel without damper
- GrateAire™ panel with damper
- GrateAire™ panel without damper

Static Pressure (inches H ₂ O)	Airflow (cfm)			
	GrateAire™ Panel		Perforated Panel	
	w/o damper	w/damper	w/o damper	w/damper
0.01	897	501	225	150
0.02	1269	708	300	225
0.03	1554	867	390	275
0.04	1794	1001	450	300
0.05	2006	1119	525	350
0.06	2198	1226	590	425
0.07	2374	1325	625	480
0.08	2537	1416	680	500
0.09	2691	1502	710	520
0.1	2837	1583	725	550

Understructure Systems

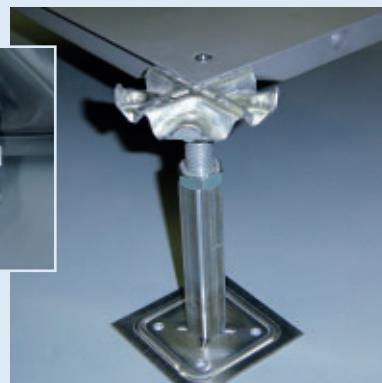
PosiLock™

Understructure Features

- PosiLock™ design provides self-engagement and positioning of floor panels.
- Self-capturing fastener remains within the panel - will not get lost.
- Steel pedestal head provides optimum strength.
- Pedestal nut provides anti-vibration and locking features.
- Seismic force-resistant pedestals are available that limit or eliminate the need for special bracing.
- Typical floor heights from 6"-18".



Panel engagement feature viewed from underside



Low Finished Floor Height PosiLock™

Understructure Features

- Available in floor heights from 2½" to 4".
- PosiLock™ design provides self-engagement and positioning of floor panels.
- 2½" finished floor height is ideal for renovation applications while providing enough space under the floor to allow for easy cable management.
- Excellent for classroom renovations and the creation of training areas.
- Easily levels uneven floors.

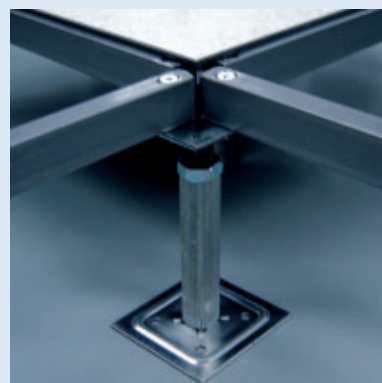


PosiLock® pedestal for low floor height systems

Bolted Stringer

Understructure Features

- Designed for computer rooms, data centers, industrial applications, and heavy rolling load areas.
- Allows floors to be built over 24" high.
- Panels can be gravity-held in understructure for fast removal and replacement.
- Stringers provide lateral resistance to heavy rolling loads and seismic loading.
- Seismic force-resistant pedestals are available that limit or eliminate the need for special bracing.
- Typical floor heights from 12"-24".



4x4 Rigid Steel Frame Understructure

4x4 Understructure Features

- Accommodates all panel systems.
- 4ft x 4ft grid spacing to accommodate large obstructions such as waffle slabs, ductwork, trenches, etc.
- Standard finished floor heights up to 60". Non-standard heights are available by special order.



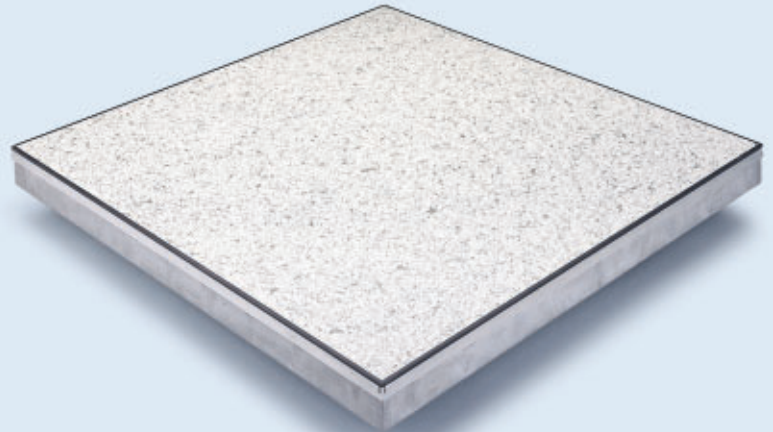
Aluminum Panel Floor Systems

Floating Floors by Tate

Available in two strengths - FF1250 and FF3000

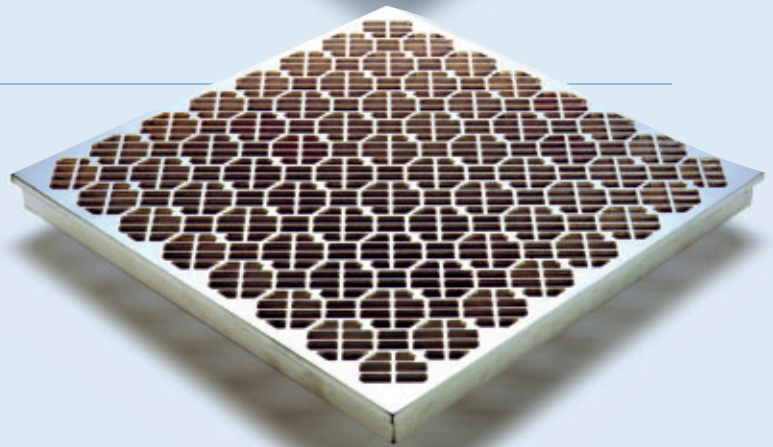
Solid Panel

- Die Cast aluminum panels meet class A fire rating.
- Available with a wide selection of conductive and static dissipative coverings or coatings.
- Contains no ferrous materials to disrupt magnetic fields.
- Panel-to-pedestal contact ensures continuous conductivity.
- Excellent rolling load performance.
- Lightweight for ease of handling.
- Conductive gasket ensures continuous conductivity.



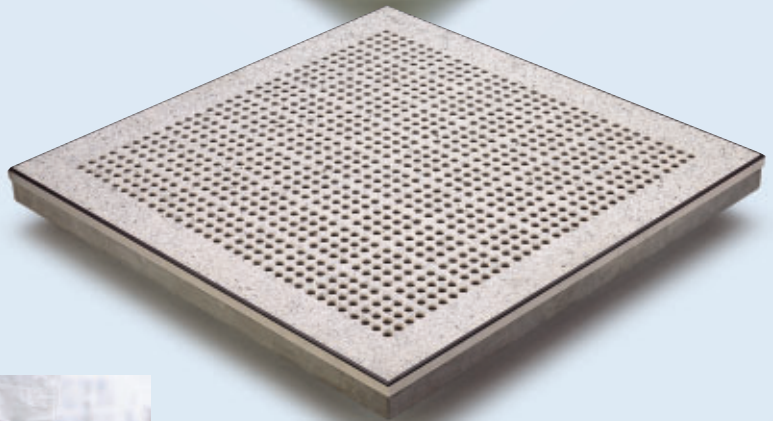
Grate

- Designed to provide superior air flow.
- Unique octagonal design reduces rolling load vibrations.
- Fully interchangeable with FF1250 and FF3000 panels.
- A damper can be used to regulate airflow.
- Available in a variety of coatings.



Perforated Panel

- Perforated panels provide optimum laminar airflow, without turbulence.
- Optional chamfered perforations provide superior particulate control with up to 20% increase in airflow.
- Several perforated panel patterns from which to choose.



Floating Floors FF1250 Performance Selection Chart

System Type		System Weight (lbs/ft ²)	Static Loads				Rolling Loads (note 3)		Impact Loads (lbs)
Panel	Understructure		Concentrated Loads (lbs) (notes 1&2)	Top Surface Deflection (inches)	Uniform Loads (lbs/ft ²)	Ultimate Loads (lbs)	10 Passes (lbs)	10,000 Passes (lbs)	
Solid Panels	Bolted Stringer / Stringerless / Cornerlock	6.50	1250	0.100	375	2500	1000	1000	150
Perforated Panels	Bolted Stringer / Stringerless / Cornerlock	6.25	1250	0.100	375	2500	1000	1000	100
Grates	Bolted Stringer / Stringerless / Cornerlock	7.25	1250	0.100	375	2500	1000	1000	150

Floating Floors FF3000 Performance Selection Chart

System Type		System Weight (lbs/ft ²)	Static Loads				Rolling Loads (note 3)		Impact Loads (lbs)
Panel	Understructure		Concentrated Loads (lbs) (notes 1&2)	Top Surface Deflection (inches)	Uniform Loads (lbs/ft ²)	Ultimate Loads (lbs)	10 Passes (lbs)	10,000 Passes (lbs)	
Solid Panels	Bolted Stringer / Stringerless / Cornerlock	7.60	3000	0.100	750	4500	2000	2000	200
Perforated Panels	Bolted Stringer / Stringerless / Cornerlock	7.40	3000	0.100	750	4000	1500	2000	100

For further information and product details and specifications, call the Tate Technical Hotline at 1-800-231-7788, or visit www.tateaccessfloors.com and click on Designer/Builder Resources.

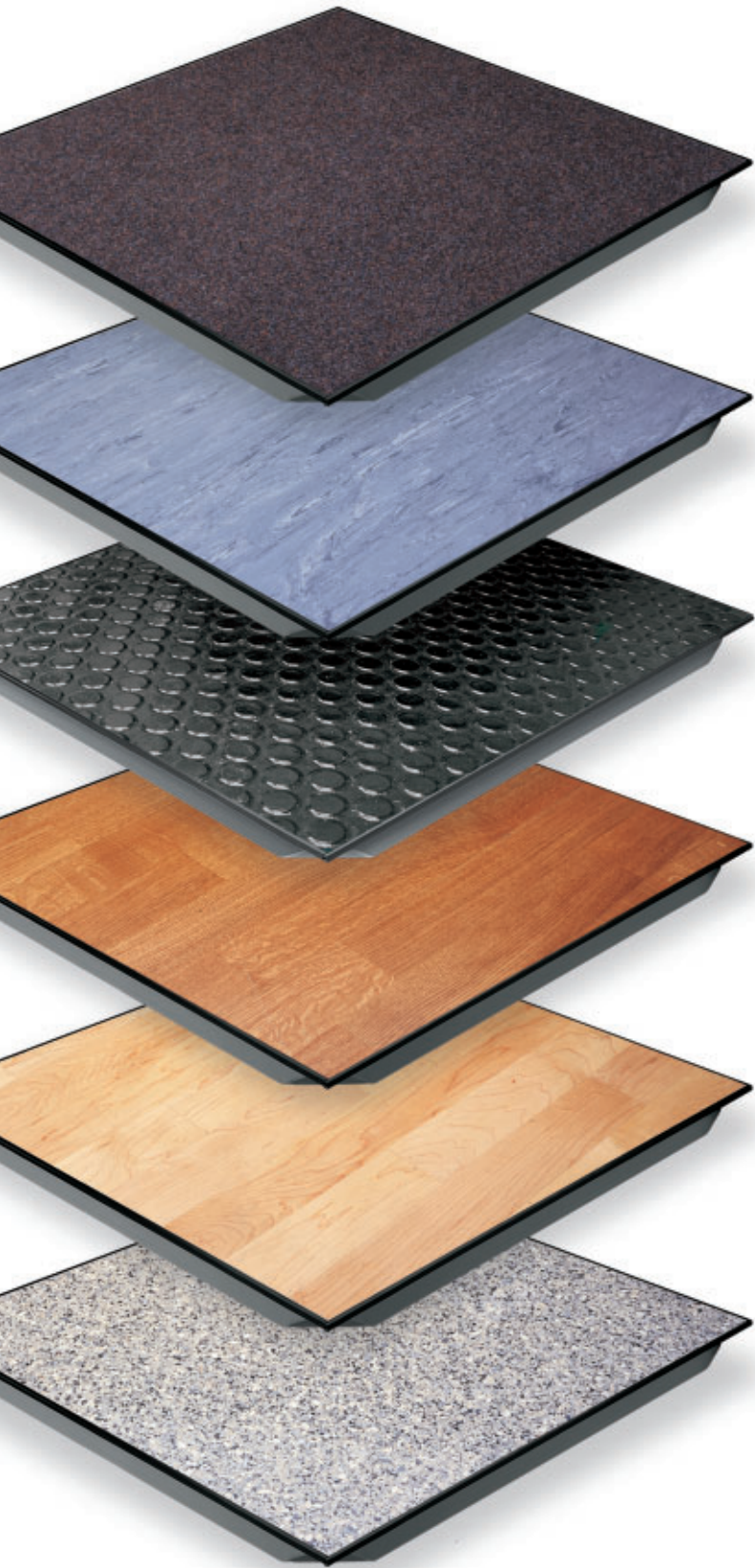
Understructure



Stringerless System

Interchangeable Panels

Bolted Stringer System

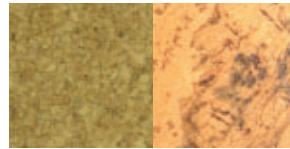


Finishes

Finishes

The advantages of access floor and underfloor systems solutions are applicable to widely varied building applications - from office to educational to laboratories, casinos and beyond. Just like the buildings themselves, the spaces within them have varied and specific requirements, both functionally and aesthetically. As with conventional flooring, the access floor finish options are limitless.

Selection of the many floor materials and finishes available



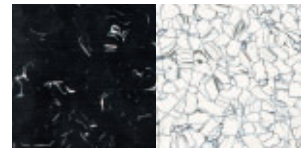
Cork



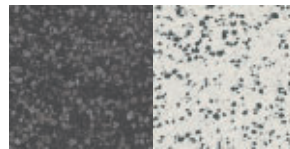
Wood



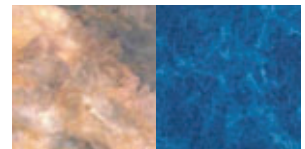
High Pressure Laminate



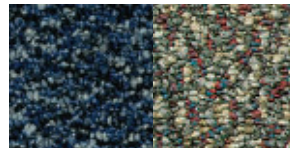
Static Control Vinyl



Stone



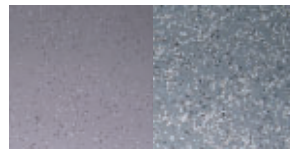
Luxury Vinyl



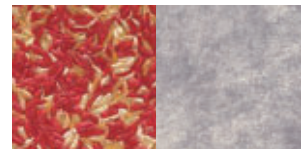
Carpet Tile



Linoleum



Rubber



Freelay Hard Surfaces

Finishes

High Pressure Laminate (HPL) with Integral Trim™ Edge

Integral Trim™ Edge Features

- Decorative edge is routed into the HPL, exposing its colored core.
- Superior wear resistance - will not detach, chip or crack.
- Cost effective alternative to laminated panels with separate trim pieces.
- A full range of colorful HPL patterns are available in 1/16" and 1/8" thickness with either black or brown edge trim colors.
- Suitable for use in equipment rooms, computer rooms, electronic assembly facilities, and areas with frequent or heavy rolling loads.

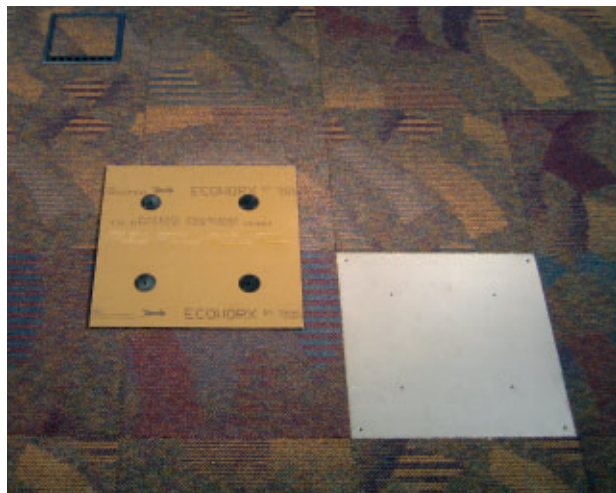


Integral Trim™ Edge complements High Pressure Laminate tile patterns

PosiTile® Carpet

PosiTile® Carpet System Features

- 24" PosiTile® carpet tiles with four permanently affixed positioning buttons are quickly positioned on access floor panels for one-to-one fit.
- No sticky adhesive on floor panels when carpet tiles are removed.
- Carpet waste is avoided when floor panels and carpet tiles with matching cutout holes are relocated. No attic stock of carpet required due to planned churn.
- Makes workstation relocation fast and inexpensive.
- PosiTile® is available in a multitude of colors and patterns.
- Available with state-of-the-art static control properties.
- A totally sustainable, cradle to cradle carpet tile product.

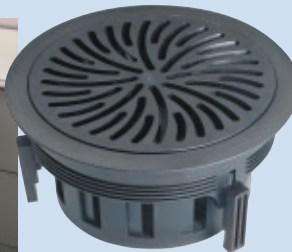
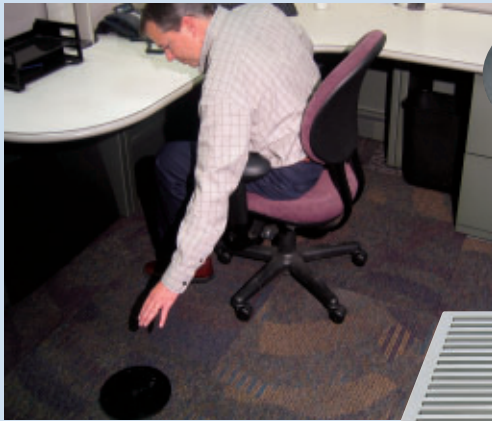


Accessories

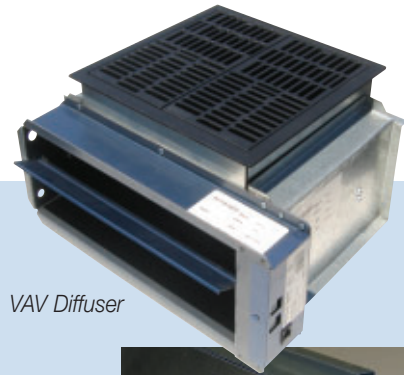
A full offering of accessories are available to complete your access floor and underfloor service distribution installation. Contact Tate @ 1-800-231-7788 for more information.

- Glass & Window Panels
- AirFlow Dampers
- Air Grilles
- Fascia Components
- Expansion Joints
- Seismic Pedestals
- Panel Lifters
- Ramp Components
- Step Components
- Handrails
- Wet Area Accessories

Underfloor Air



Passive Diffuser



VAV Diffuser

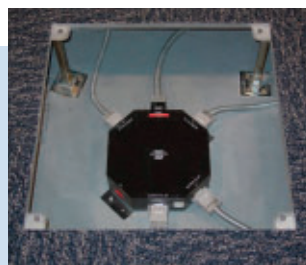


Plenum Divider

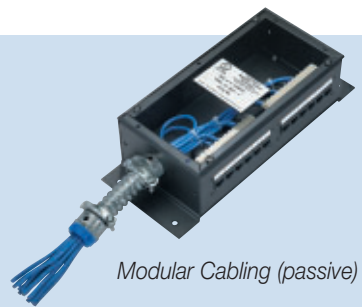


Linear Diffuser

Modular Wiring & Cabling



Modular Wiring



Modular Cabling (passive)



High Capacity PVD



Grommets



State Government: Capitol Area East End Complex, Block 225, Sacramento, CA, 225,000 ft²



Casino: Tulip Casino, Marysville, WA, 195,000 ft²



Renovation: The Snead Building, Louisville, Kentucky, 65,000 ft²

Tate®



Tate Access Floors, Inc.

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Tate Hotline: 1-800-231-7788 Tel: 410-799-4200 Fax: 410-799-4207

Production Facilities: 7510 Montevideo Road, Jessup, MD 20794
52 Springvale Road, Red Lion, PA 17356

tateaccessfloors.com
kingspan.com



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of the
Kingspan®
Group plc

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