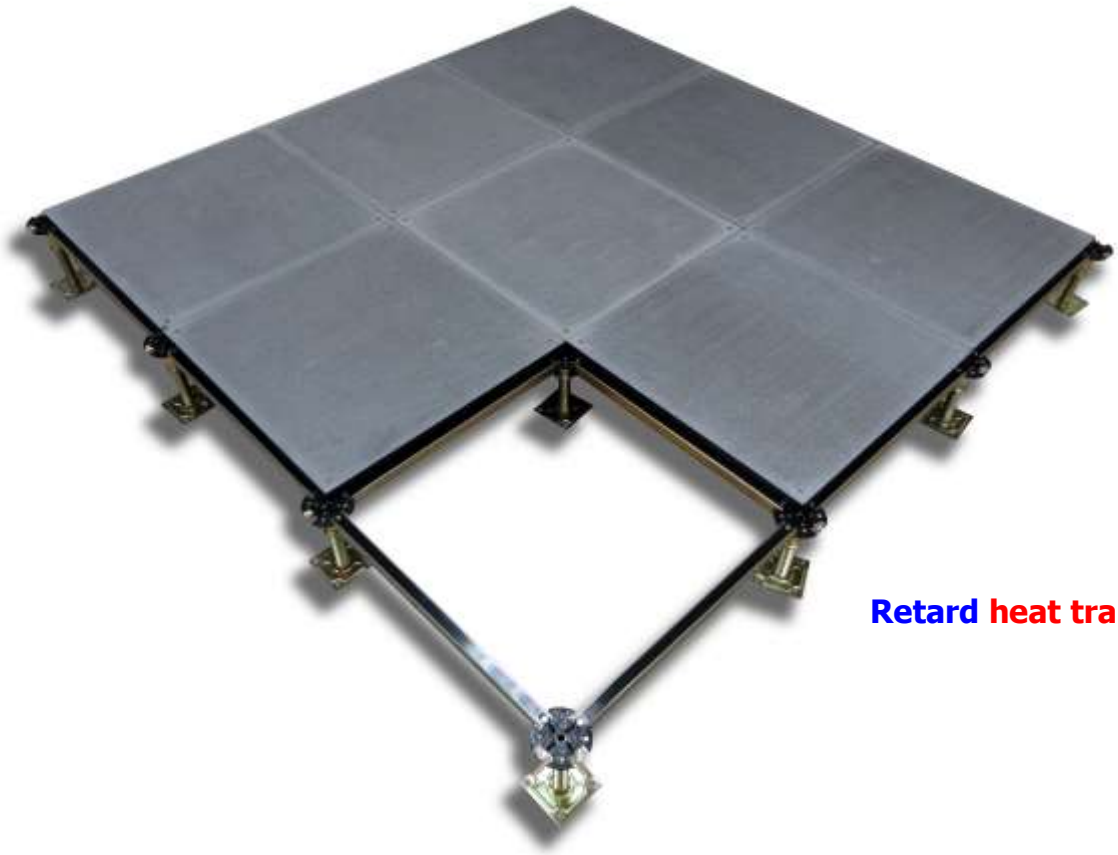
NETFLOOR®

Alcore®

Raised Access Flooring System



Retard heat transmission

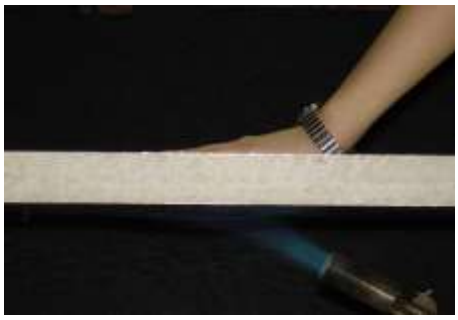
suitable for bonding by all type floor covering
carpet tiles, sheet vinyl, stoneware tiles, epoxy,..

Alcore® series

Cement-fiber access floor

"non-combustible"
&
Retard "heat-transmission"

System suitable for all institutional interiors ---



safety access floor for....

high-rise buildings
government offices
commercial complex offices
hotels, hospitals, moisture areas,..

Safety – better heat-retard than steel cementitious systems

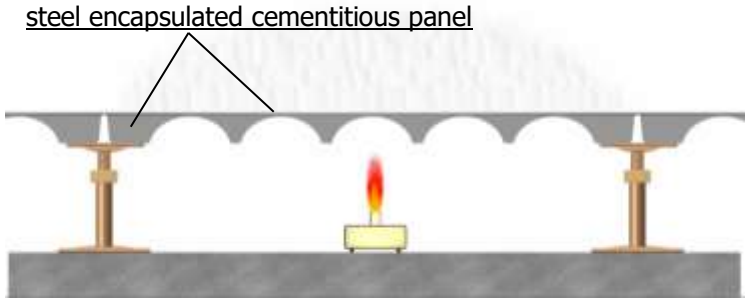
A. "Non-Combustible" ---

Both Alcore and steel/cementitious access floor systems are non-combustible.
Non-combustible is a safety factor to stop fire from burning through the access floor.
However, it doesn't means covering complete protection in terms of safety.

B. "heat-transmission control"

The under-floor cavity provides space running pipes, cables, air-distribution, and etc. But in the meantime, it might become chamber of flame in case fire spreads underneath. When access floor's FFH (finish-floor-height) goes higher (say greater than 300 mm), will be more room for fire spread. In this regard, to safeguard lives and facilities above the access floor, heat-transmission control shall be treated equally important.

The egg-crate steel cementitious panels transmit & spread heat quickly---

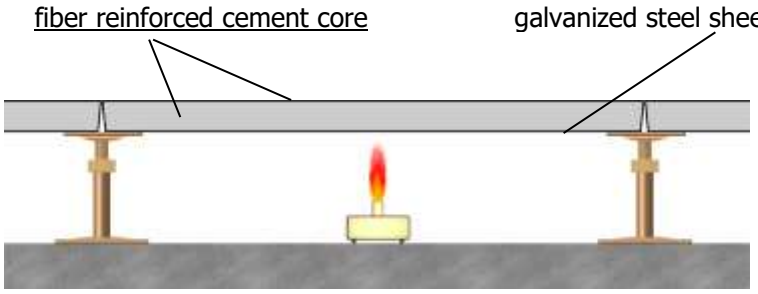


Steel cementitious access floor transmit heat almost simultaneously from bottom once fire starts under the access floor. Heat transmits through steel welding spots and flanges, spreading to surface of the access panel, which shall affect or damage to lives and facilities above.

The popular egg crate type steel cementitious access floor systems are is "non-combustible", but it transmits heat because the panel encapsulated by steel which welded the bottom and top sheets. As to woodcore, it is not non-combustible. Fire and heat will be transmitted quickly as soon as fire burning through

Alcore system retard heat transmission

Alcore access panel consists of cement fiber reinforced core, bare finish. Except bottom of the panel, there is no continuous or encapsulated steel. As a result, heat occurred at bottom of panel has been effectively retarded by the panel core.

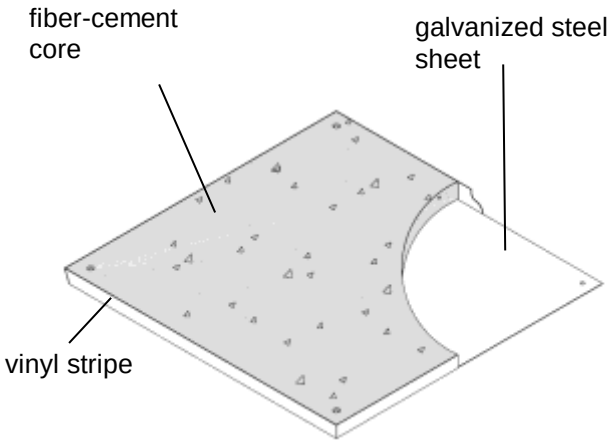


galvanized steel sheet
only bonded at bottom of panel.
The cement calcium sulphate core consists of full panel thickness, which effectively retard heat transmission causing by fire.

The system

1. Alcore panel ---

Steel-base fiber re-enforced cement core.
The special high pressure production procedure enhance the panel core at high rigidity.
Panel bottom bonded and supported by galvanized steel sheet which contributes the panel body's elasticity. The composition performs at high loading property



panel core retard heat effectively
there is no continuous metal at sides

2. Under-Structures: full steel system corrosion protection by zinc plating, top of the pedestal column by plastics pad/divider, vinyl stripe at top of stringer

Standard FFH: 150 mm up to 600 mm.
FFH 150 mm ~ 300 mm, stringerless is applicable.
FFH 300 mm and higher, stringer shall be applied

3. Suitable for top-finished by all type of floor covering

The cement-base panel surface provides excellent substrate for bonding by all type of floor covering. The popular carpet, vinyl tiles can be bonding on top of all type access floor. However, the stoneware tiles are not suitable to bond onto steel cementitious, nor the wood-core panels, because most of those panels are galvanized steel sheet, or steel sheet with powder-coating.

3-1 Alcore bare panel: the cement-base surface is suitable for bonded by all type of floor coverings to be bonding at job sites.
Resilient floor covering: commercial rate carpet tiles, sheet vinyl, vinyl tiles, etc.
Porcelain tile and other stoneware tiles, etc.

3-2 site-bonding instruction
AA. understructure – same procedure as ordinary access floor system
BB.lay in base panels (**please note the below photos are for installation image)
B-1 lift access panel by using 3-sucker lifter, and **shall be holding by other hand** at same time.
B-2: lay panels on grid in order, check leveling in sequence.


Install access panel and check level in sequence

top finished – **stoneware tiles:** granite, marble, porcelain tiles,..
E-1: clean and rinse panels' surface and stone tiles' back.
E-2: apply thin-set adhesive by 10 mm square notched trowel, coverage about 5~6 piece access panels each time.
E-3: apply avg. 1 mm thick thin-set adhesive at stone tiles' back
E-4: install stone tile on top of the access panel.
insert tile spacer at angles, 3 mm gap in-between tiles forms automatically, check leveling one by one in sequence.
E-5: clear thin-set adhesives residual inside the 3 mm gap in-between tiles.
E-6: grout the gaps: allow 24 hours thin-set adhesives setting time before grouting. (follow instruction by the adhesives and grout manufacturer) .


notched trowel


thin-set adhesive


tile spacer


rinse panels and tiles


apply adhesive on panels

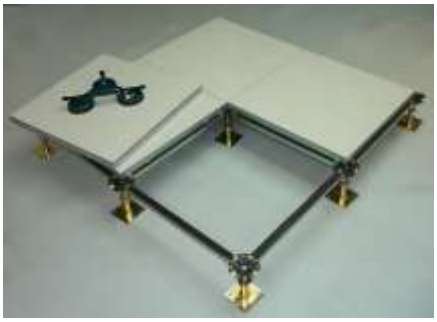

apply adhesives on tiles


insert tile spacers, form 3 mm gap for grouting, check leveling

3-3: factory-bonding:

Anti-static vinyl tiles:
Engineered wood: engineered oak, bamboo tiles, etc.

Porcelain tiles:
Selected micro-powder, double charge porcelain tiles available for special run.
Sides of porcelain tiles shall be bonded by vinyl stripes as protection.



3-4: installation at high-moisture environment
The understructure supporting systems, including stringers and pedestals, shall be special treatment to meet job site requirements. This includes hot-dipped galvanize or mechanical plating treatment per specifications.

Specifications:

System: Alcore® Access Flooring System

Manufacturer: Netfloor, Inc.
Module size: 600mm x 600mm
System Height: 150 mm (6") ~ 600 mm (24")

Loading property: in accordance with CISCA by 1" square indenter

Systems	Concentration Load	Concentrate Ultimate Load
AL3000	1000 LB (<2.5 mm depression)	2000 LB

Flammability: Non-combustible, meet BS476, part 4

Main Components:
1. Access panel: fiber-cement core, bottom bonded and supported by galvanized steel sheet, four sides bonded by vinyl stripe.
   - 1.1 Size: 600 mm x 600 mm
   - 1.2 Thickness: 30 mm
   - 1.3 Bottom: galvanized steel sheet, thickness 0.5 mm
   - 1.4 PVC stripes bonded at four sides
2. Understructure: consists of adjustable pedestal and stringer.
   - 2.1 Pedestal
     - 2.1.1 Pedestal Headset: Steel plate, plastics divider on top, corrosion resistance by zinc plating no less than 5 micron.
     - 2.1.2 Pedestal column and base plate: Full steel, corrosion protection by zinc plating, no less than 5 micron. Pedestal column diameter no less than M16. Base plate size no less than 100 mm x 100 mm.
   - 2.2 Stringer: Electro galvanized steel, top bonded with vinyl stripe.

Floor Coverings
The system is suitable bonded by all commercial rate floorings including carpet tile, vinyl tiles, porcelain tiles, engineered wood and bamboo tiles.
Accessories: cutout panel, outlet box, boarder components to support quick and efficient installation.

Warranty: 5 years limited warranty applied to all Alcore systems.
In pursuing continuous quality improvement, the manufacturer reserves the right to vary specifications without prior notice.

www.netfloor.com

a product division of Netfloor, Inc.
August, 2020