

Alcore[®] Raised Access Flooring System



Alpha calcium sulphate core panel

Non-Combustible

+

Heat Transmission Control



Alpha calcium sulphate core access panel

"non-combustible"

+

"heat-transmission control"



System of complete safety ----

Non-combustible:

Access panel: steel enclosure (top and bottom) fiber reinforced calcium sulphate core Understructure: full steel pedestal system.

Heat transmission control:

Enclosure galvanized steel on top and bottom, calcium sulphate core as panel body which effectively stopped heat transmission from bottom of the access panel to top.



First choice for....

high-rise building corporate headquarter hotel, school, factory, control room...



Alcore[®] System --- meets complete safety requirements

"Non-Combustible" --- is fundamental safety factor ---

Non-combustible is a basic safety factor to stop fire from burning through the access floor. However, it isn't complete to offer sufficient protection on above of the access flooring.

"heat-transmission control" --- also important safety factor which shall not be neglected

The under-floor cavity provides space running pipe, cables, air-distribution, and etc. But in the meantime, it may become chamber of flame routes in case fire starts underneath. When access floor's FFH (finish-floor-height) goes higher, there 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 heat ---



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 seriously 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 stop heat transmission



Fire at 850 degree Celsius burning at bottom Alcore access panel, lasting 15 minutes, the surface temperature shall be less than 50 Celsius

The system

1. Alcore CT bare panel ---

Fiber re-enforced alpha calcium sulphate core, enclosed by galvanized steel at top and bottom. The special high pressure production procedure enhance the panel core at high rigidity. Top and bottom bonded by galvanized steel sheet which contributes the panel body's elasticity. The composition performs at high loading property



Top and bottom bonded by galvanized steel sheet, to protect calcium sulphate core. There is no connecting points at the steel sheets.

The calcium sulphate core stop fire heat transmission.



2. Alcore special CTR bare panel

Alcore's patented two-layer calcium sulphate core construction panel. In addition to the top/bottom steel sheet, an extra re-enforced steel sheet bonding in middle of 2 layers fiber re-enforced calcium sulphate core.



Alcore CTR access panel:

- 1. Light weight: lighter than regular calcium sulphate access floor and steel cementitious systems.
- 2. Less load bearing to building structure at same loading property.
- 3. Low FFH at same net clearance.

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

Supply to install standard floor height at FFH 100 mm up to 1200 mm.

FFH 100 mm ~ 300 mm, free standing (stringerless) is applicable. FFH 300 mm and higher, stringer shall be applied

Floor coverings ----

Alcore access panel accommodates all type of commercial flooring coverings, whether directly installing carpet tile or vinyl at job site, or factory applied bonding for hard surface flooring coverings such as ceramic tile, stone or wood.

Alcore bare panel --- galvanized steel top

Commercial rate carpet tile, vinyl tile (greater than 4.5 mm thick), installing at job site after completion of Alcore access floor installation.



Bare Panel for accommodation of carpet tile

Alcore factory finish panel

HPL, vinyl tile, parquet, polish porcelain, granite, or other hard natural floor tile, shall be factory bonded.



Factory bonded floor coverings ----

- . Anti-static HPL
 - . Conductive vinyl tile
 - . Porcelain tile
 - . Granite
 - . Wood & Parquet













Specifications:

System: Netfloor[®] Alcore[®] Access Flooring

Module size: 600 mm x 600 mm **System Height:** 100 mm (4") ~ 1,200 mm (48") **Loading property:** by 1" square indenter at less than 2.5 mm depression

<u>Systems</u>	Concentration Load	Concentrate Ultimate Load
CT-30	> 4.5 kN	> 9.0 kN
CT-45	> 5.63 kN	> 12.0 kN

Flammability: Non-combustible, meet BS476, part 4

Heat Transmission Control: Bottom surface of the access panel exposure to temperature 850°C for 15 minutes shall not transmit to the top surface

temperature more than 50°C.

Statics control: The system when assembly is statics conductive.

Main Components:

1. Access panel: alpha type calcium sulphate core, top and bottom galvanized steel enclosure,

boarders bonded with vinyl stripe. Bare top surface only if factory bonding with vinyl tile, HPL, ceramic, porcelain, wood tile / parquet.

- 1.1 Size: 600 mm x 600 mm
- 1.2 Thickness: 30 mm thick (system CT-30) and 38 mm thick (system CT-45).
- 1.3 Top and bottom galvanized steel sheet: thickness 0.5 mm
- 1.4 Borders: PVC stripes bonded at four sides, completely conceal calcium sulphate core.
- 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: standard FFH (finish floor height) 100 mm ~ 1200 mm. Full steel, corrosion protection by zinc plating, no less than 5 micron. Pedestal column 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.

Stringer is optional when FFH lower than 300 mm height.

Stringer shall be used when FFH 300 mm or greater.

3. Airflow panel: size 600 mm X 600 mm, ventilation ratio no less than 20%, steel powder coating, or aluminum grid panel size 600 mm X 300 mm.

Floor Coverings

The system is suitable covered by most commercial rate floor coverings. Carpet tile and vinyl tile are installing at job site. Wood, stone, porcelain or ceramic tile shall be bonded at factory.

Accessories: cutout panel, outlet service box, boarder components to support quick and efficient installation.

Warranty: 5 years limited warranty applied to all Alcore systems.

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

Alcore®

Raised Access Flooring System

Patent pending ---China: 200620131531.5 Taiwan: 95214330

---- world-wide patent pending ----



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