# Alcore AL3000 Access Floor System

SECTION 09 69 00
Access Flooring

## Part 1 - General

1.1 Summary: The system provides an access flooring structure comprising galvanized steel based fiber cement access panels, height adjustable steel pedestals to configure supporting understructure, and all necessary accessories. System to be both bolted stringer and corner locked.

1.2 Performance requirements

A. Presenting load performances shall be tested in accordance with CISCA (Ceiling & Interior Systems Construction Association) – “Recommended Test Procedure for Access Floors”. And all tests of the products shall be conducted and certified by independent engineering and testing laboratories.

B. Access Panels:

B1: Concentrated Load: The panel shall support concentrate load of 1000 lbs, by use of 1 inch square indenter, at any location of the panel, with maximum deflection 0.10 inch (2.54 mm).

B2: Concentrate Ultimate Load: The panel shall be withstanding concentrate ultimate load greater than 2000 lbs, by using of 1 inch square indenter without failure.

B3: Uniform Load: The panel shall support a uniform load of 16.6kN/M2 by using of one square foot area indention at any location of panel with maximum top surface deflection 0.10 inches (2.50 mm).

B4: Flammability: system is rated non-combustible, meet ASTM E-84 class A, and BS476 part 4.

B5: Surface floor covering: the system shall be suitable for top-finished bonding by ceramic and stoneware tiles, as well as bonding by all type of resilient floor tiles such as carpet, vinyl, rubber, wood etc.

C: Pedestals

C1: Axial Load: Pedestals shall be capable of sustaining a 5000 lbs axial load without permanent deformation.

1.3 Submittals

A: Necessary information to describe the product and performance including proposed product type, quantities, finished floor heights, details sheets of system drawings and shop drawings.

B: Test reports, certified by the manufacturer in-house testing, and independent testing laboratories, in accordance with CISCA recommended test procedures.

**Part 2 - The Products**

2.1 Access floor system and components

A. The system
A1. Alcore AL3000 Access Floor, bolted stringer and corner locked system
A2. System height: standard system height 6” (150 mm) to 36” (914 mm)
A3. Modular size: at 600 X 600 mm (23.62” X 23.62”).
A4. System weight: average 58-64 kgs per square meter.
B. Manufacturer: Netfloor, Inc.

2.2 Access Panels
A. Alcore AL3000 access panel: the access panel consists of high-strength fiber cement core, bottom bonded and supported by galvanized steel sheet. Four sides of panel bonded and protected by vinyl stripes. Surface of panel to be condensification treatment. Four corners to be locked to top plate of pedestal.
B. Size of panel: nominal 24” X 24”, or 600 mm X 600 mm (23.62” X 23.63”), and all panels shall be inter-changeable.
C. Thickness of access panel shall be no less than 30 mm

2.3 Supporting Understructure
Supporting understructure consists of pedestals and stringers. All pedestals and stringers are full-steel, corrosion-resistance treatment by zinc-plating no less than 5 micron, or made of galvanized steel. Braces are recommended only when using for finished floor height greater than 600mm, or under special requirements.
A. Pedestals
A1: pedestal consists of top-head with gasket and pedestal-base
A2: Top-head consists of top-plate welded or riveted by thread rod. The top-head section shall be able to provide height adjustment of range +/- 25 mm.
A3: Size of the top-plate shall be no less than 90 mm X 90 mm, thickness no less than 3.0 mm
A4: Pedestal-base consists of a formed steel plate at bottom size no less than 100x100mm, welded or riveted to a steel tube (or pipe).
A5: diameter of steel column or pipe shall be no less than 22mm, thickness no less than x1.5mm
B. Stringers
Fix onto pedestals to form a grid-pattern understructure, ensuring lateral stability in all directions.
B1: Length of stringers to provide 48” or 24” configuration onto 24” distance pedestals.
B2: dimension of stringers shall be no less than 25 mm X 25 mm, thickness no less than 1.0 mm

2.4 Accessories: Ramps, handrails, skirtings, perimeter pedestals, adhesives, and etc., as indicated in the contract drawings.

2.5 Finishes

Use of stoneware tiles on the access floor system shall be indicated installation methods in the contract drawings.

Use of resilient commercial rate carpet tiles or vinyl tiles shall be installed in accordance with resilient floors manufacturers' installation instruction.

**Part 3 - Execution**

3.1 Preparation:

Job site shall be free of vibration, rocking, cracking, grease, or debris.

All debris, foreign objects shall be removed before installation.

3.2 INSTALLATION

A. Install access flooring system by qualified raised floor raised floor installation teams, and by follow manufacturer's installation guide.

B. Access floor system shall comply requirements by specific applications per contract drawings and manufacturer's system drawings.

C. Cleaning and protection

C1: Clean access flooring after installation. All residuals shall be removed from the job site.

C2: Other trades, such as electrical sub-contractors, when requires removing access panels, shall place the panels at proper and safety location, and shall re-store removed panels 100% back onto understructure systems at original position right after completion of each electrical work.

C3: Other trades, when working on top of access floors shall make proper and adequate protection. Heavy carts or equipments, when passing through access floors, shall apply continuous plywood panels of minimum 12 mm (0.47") thick to protect from work of other trades.

C4: Moving heavy carts or lifters on access floor: extra pavement of protection plywood shall be installed on carts path, and shall consult the manufacturer's regional distributor, or the manufacturer.

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