

SECTION 09 69 33 – LOW PROFILE ACCESS FLOORING

NETFLOOR CA500R system finish floor height 1.97" (50 mm)

PART 1 - GENERAL

1.1 SUMMARY

- A. A low profile cable management access flooring structure with access panels, base connectors to connect access panels, to form reticulated accessible cable trenches, and which covered and protected by cable trench caps.

1.2 PERFORMANCE REQUIREMENTS

- A. General: the low profile access flooring, when installed, structured with self-standing access panels, grid-pattern cable trenches, facilitating easy distribution, extension of electrical, networking and telecommunication cables, and accommodate outlet floor boxes, and cable trench caps to cover and protect cables running in the cable trenches.
- B. Access panels and steel cable trench caps

Tested in accordance with CISCA

- 1. Concentrated Load: by 1" square indenter
 - a. 400 psi: less than 0.1" (2.5 mm) depression
- 2. Concentrate Ultimate Load: by 1" square indenter
 - a. Access panel: greater than 500 psi
 - b. Steel Central Cap and Flank Cap: greater than 1300 psi
- 3. Uniform Distribution Load: 0.06" (1.5 mm) depression
 - a. greater than 600 psf (on 600 X 600 mm module set)
- 4. Uniform Ultimate Load:
 - a. at 2000 psf undamaged (on 600X 600 mm module set)
- C. Flammability: meet NFPA 253 class A as tests in accordance with ASTM E-648 Critical Radiant Flux. Meet BS476, part 7 B2
- D. Earthquake Performance: access panel are self-stand, each panel supported by 64 built-in pedestals. Each panel is connected by Base Connector at four corner pedestals. In the event of earthquake, the system will not be collapsed.

- E. Environment protection:
1. access panels made of recycled poly-propylene contents more than 60%. Complies and contributes to LEED credit points.
 2. no pollution to sub-floors: The access panels are self-stand. No adhesives required to bond access panels' pedestals onto sub-floors. No pollution to sub-floors at time of installation.
 3. no damage to sub-floors: At time of relocation, no damage to sub-floors.
 4. re-usable: In the event of re-location, the systems' components shall be more than 95% re-usable.
 5. 100% recyclable: All components of the systems, access panels, base connectors, cable trench caps, sound attenuation blanket, and accessories, are 100% recyclable.

1.3 SUBMITTALS

PART 2 - PRODUCTS

2.1 Access floor system and components

- A. The system
1. Netfloor low profile access floor systems
 2. system: CA500R series
 3. system height: 1.97" (50 mm)
 4. modular size: 23.62" X 23.62" (600 X 600 mm), consists of 1 access panel (UniPanel), 1 Base Connector, 1 Central Cap, and 4 Flank Caps.
 5. system weight: 2.76 LB per square foot (13.5 kg kg per sq. meter)
 6. manufacturer: Netfloor, Inc.
- B. Access Panels (UniPanels): self-standing access panel, each panel consists 16 sub-panels, 64 built-in pedestals.
1. panel size: 20.078" X 20.078" (510 mm X 510 mm)
 2. height: fixed height 1.97" (50 mm)
 3. materials: fire-retard recycled poly-propylene.
- C. Cable Trench Caps: to cover the cable trenches

- D. Central Caps: size 5.82" X 5.82" (148 mm X 148 mm), thickness 0.090" (2.3 mm), 5 mm bend at four sides, reinforced ribs at center, to install, and cover, at intersection of cable trenches, protection against corrosion by electro-deposition.
- E. Flank Caps: size 8.78" X 4.92" (223 mm X 125 mm), reinforced ribs, to install, and cover cable trenches, at sides of access panels. Made of 0.090" (2.3 mm) thick steel, protection against corrosion by electro-deposition.
- F. Base Connectors: size 6.65" X 6.65" X 0.59" (169 X 169 X 15 mm), made of recycled poly-carbonate plus ABS.
- G. Sound Attenuation Blanket: meet UL94 HB, PE foam, 1 meter width, 0.078" (2 mm) thick, install under access panels to absorb impact sound causing by pedestrians.
- H. Cable Trenches configuration: At time of installation, apply Base Connectors to access panels' corner pedestals. Continuous connection at access panels' pedestals, automatically forms standard distance 3.54" (90 mm) wide, reticulated cable trenches within every 23.62" (600 mm) distance.
- I. Cable Trenches capacity:
 - 1. width: 3.54" (90 mm)
 - 2. clearance: 1.61" (41 mm)

2.2 ACCESS FLOOR COVERINGS

- A. The systems are suitable for bonded by commercial grade modular carpet tiles, and vinyl tiles of no less than 0.177" (4.5 mm) thick.

2.3 ACCESSORIES

- A. Accessories: All accessories for perimeter, re-enforcement, and others, as indicated on the manufacturer's system drawings.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Job site: shall be free of vibration, rocking, cracking, grease, or debris. All debris, foreign objects shall be removed before installation.

3.2 INSTALLATION

1. Install access flooring system by qualified raised floor raised floor installation teams, and by follow manufacturer's installation guide.
2. Access floor system shall comply requirements by specific application per manufacturer's system and shop drawings.

3.3 CLEANING AND PROTECTION

- A. Clean access flooring after installation. All residuals shall be removed from the job site.
- B. Other trades, such as electrical sub-contractors, when requires removing cable trenches' caps for cable routing, shall place the caps at proper and safety location, and shall re-store removed cable trenches 100% back onto cable trenches at original position right after completion of each electrical work.
- C. 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 0.47" (12 mm) thick to protect from work of other trades.
- D. Moving extra-heavy carts or lifter on access floor: shall consult the manufacturer's regional distributor, or regional sales representative.

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