

## SECTION 09 69 33 – LOW PROFILE ACCESS FLOORING

NETFLOOR Grand Square GS600 system

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. A low profile cable management access flooring structure with access panels, to connect pedestals, and to form reticulated cable trenches for routing the cables and utility pipes.

#### 1.2 PERFORMANCE REQUIREMENTS

- A. General: the low profile access flooring, when installed, structured with access panels (Top-Panels) and connecting pedestals (Base Connectors), to form grid-pattern trenches, facilitating easy distribution, extension of electrical, telecommunication cables, and accommodate utility pipes and outlet floor boxes, and access panels to cover and protect cables and/or pipes running in the cable trenches.
- B. Top-panels (access panels)
  - 1. Concentrated-Load: tested by 1" square indenter
    - a. 2000N (450 LB) less than 2.5 mm depression
  - 2. Ultimate-Load: greater than 5000N (1125 LB)
  - 3. Uniform Load: greater than 50 psi
- C. Flammability:
  - 1. Top-Panel: full steel, non-combustible
  - 2. Base Connectors: meet NFPA 253 class A as tests in accordance with ASTM E-648 Critical Radiant Flux. Meet UL94 V2, BS476, part 7 B2.
- D. Earthquake Performance:
- E. Environment protection:
  - 1. Base Connectors made of 100% recycled poly-propylene which contents more than 25% of total value of the system. The system complies and contributes to LEED credit points.

2. no pollution to sub-floors: The systems are installed without using of adhesives to bond 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% up to 100% re-usable.
  5. 100% recyclable: All components of the systems, Top panels and Base Connectors, and accessories, are 100% recyclable.
- F. Electrical: the low-profile access flooring is not part of grounding system. All electrical cable, conduit installed under the access floor, or floor box installed on the access floor, must be grounded independently, not as part of the access floor system.

### 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: GS600 series
  3. system height: 60 mm (2.36")
  4. module size: 228.6 mm X 228.6 mm (9.0" X 9.0"), consists of 1 Top-Panel and 1 Base Connector.
  5. system weight: 21 kg per sq. meter (4.29 LB per SF)
  6. manufacturer: Netfloor, Inc.
- B. Top-Panel (access panel): full steel panel, with straight angle bends at four edges, and re-inforce ribs at center of the panel.
1. panel size: 227 mm X 227 mm (8.93" X 8.93")
  2. height: 10 mm (0.39")
  3. materials: hot-dip galvanized steel.
- C. Base Connector (connecting pedestal):

1. size 108.6 mm X 108.6 mm (4.27" X 4.27")
  2. height: 58 mm (2.28")
  3. materials: recycled poly-propylene
- D. Cable Trench configuration: At time of installation, place edges of the Top-Panel onto Base Connectors slots and press down by hands, to firmly seat the Top-Panels on the Base Connectors. Continuous connection onto the Base Connectors by the Top-Panel, which automatically forms standard distance 120 mm (4.72") wide, reticulated cable trenches within every 228.6 mm (9.0") distance.
- E. Cable Trenches capacity: within every 228.6 mm (9.0"), for both horizontal and vertical direction:
1. width: 120 mm (4.72")
  2. clearance: 50 mm (2.0")

## **2.2 ACCESS FLOOR COVERINGS**

- A. The systems are suitable for top-finished by commercial grade modular carpet tiles, and vinyl tiles of no less than 4.5 mm (0.177") thick, as well as suitable for T&G foam-backed wood or engineered wood planks..

## **2.3 ACCESSORIES**

- A. Accessories: All accessories, such as for perimeters, ramps, cable exits, utility boxes, 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 flooring installation teams, and by follow manufacturer's installation guide.

2. Access floor system shall comply requirements by specific applications 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 Top-Panels for cable routing, shall place the Top-Panels at proper and safety location, and shall re-store removed Top-panels 100% back onto the Base Connectors 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 12 mm (0.47") 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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