SECTION 10270
ACCESS FLOORING

PART 1 - GENERAL

1.1 SUMMARY:

A. Section Includes:
   1. Support system.
   2. Removable floor panels.
   3. Plenum dividers and grilles.
   4. Grounding of system.

B. Related Sections:
   1. Section 03300 - Cast-in-Place Concrete: Concrete sealing.
   2. Section 06200 - Finish Carpentry: Base at floor periphery.
   3. Section 09650 - Resilient Flooring: Resilient base.
   4. Division 16 - Electrical: Electrical raceways and grounding.

1.2 REFERENCES:

A. Requirements of Regulatory Agencies:

1.3 SYSTEM DESCRIPTION:

A. Structural Performance:
   1. Floor Panels: Units including those with cutouts capable of supporting a uniform live load of 250 lbs. per sq. ft. and (but not concurrently) a 1000 lb. concentrated load on 1" sq. area with a deflection under either load not more than 0.080", and a permanent set not to exceed 0.010".
   2. Pedestals: Assemblies capable of resisting a 5000 lb. axial load and 1000 inch-pound overturning moment per pedestal without panels or other supports in place.
   3. Grid System: Stringers capable, without panels in place, of supporting a concentrated load of 200 lbs. at center of span with a permanent set not to exceed 0.010".
   4. Ultimate Strength or Safety Factor: Capable of sustaining twice the enumerated loads at ultimate strength (failure).
B. Electrical Resistance to Ground of System:

1. Static Control Floor Covering: Not less than 500,000 ohms nor more than 20 billion ohms, measured across surface of floor covering through panel to understructure by test method for conductive flooring, Chapter 3, NFPA 99.

2. Between Panel and Understructure: Not more than 10 ohms.

C. Fabrication Tolerances:

1. Size: ±0.015".
2. Squareness: ±0.015".
3. Flatness on Top of Panel: ±0.020" measured on a diagonal.

1.4 SUBMITTALS:

A. Manufacturer's Data:

1. Certification Requirements:
   a. Certify that products furnished for this project are asbestos free.
   b. Certify that products meet or exceed specification requirements.
   c. Submit certification of flame spread rating as tested by testing organization, indicating rating designation of materials and assembly.
   d. Submit certification of specified design strengths and electrical resistance as tested by testing organization.

2. Maintenance:
   a. Instructions for proper maintenance and cleaning.

B. Submit one floor panel of color and finish required.

1.5 QUALITY ASSURANCE:

A. Installer Qualifications:

1. Approved by manufacturer of access floor materials and assemblies.

2. Provide list of at least five other complete access floor installations of equal scope to this project.

B. Regulatory Requirements:

1. Provide access flooring which, when installed, complies with NFPA No. 75 requirements.
C. Coordination of Work: Coordinate location of access flooring pedestals to prevent interference with mechanical and electrical work in underfloor cavity.

1.6 MAINTENANCE:

A. Extra Material:

1. Provide extra floor panels at the rate of 5% of the total amount installed.

2. Provide extra pedestals with stringers and related components at the rate of 5% of the total amount installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

A. C-Tec, Inc.

B. Hitachi Metals America.

C. Tate Architectural Products, Inc.

D. USG Interiors, Inc., Access Floor Division.

2.2 GROUNDING SYSTEM:

A. Positive electrical grounding system.

2.3 MATERIALS AND COMPONENTS:

A. Fabricate from non-combustible materials throughout, except wearing surface.

B. Provide vibration proof mechanism for holding fine adjustments in height. Range of adjustment to be not less than 2". Include means of locking leveling mechanism at a selected height, which requires deliberate action to change height setting and prevents vibratory displacement.

C. Fabricate units of sufficient height to provide required underfloor clearance.

2.4 ACCESSORIES:

A. Cutouts: Fabricate cutouts in floor panels for cable openings as directed by Owner. Trim with rubber or plastic edging and provide foam rubber pad for sealing and protection of cables.

B. Panel Lifting Device: Furnish two.
PART 3 - EXECUTION

3.1 INSTALLATION:

A. Level installed access floor to within 0.10" of true level over the entire area and within 0.0625" in any 10' distance.

END OF SECTION 10270