Part 1 General

1.1 RELATED SECTIONS

.1 Division 01 – General Requirements.

1.2 REFERENCES

.1 Aluminum Association (AA).

.1 DAF 45-03, Designation System for Aluminum Finishes.

.2 Canadian General Standards Board (CGSB).

.1 CAN/CGSB-1.81-M90, Air Drying and Baking Alkyd Primer for Vehicles and Equipment.

.2 CAN/CGSB-1.88-92, Gloss Alkyd Enamel Air Drying and Baking.

.3 CAN/CGSB-1.104-M91, Semigloss Alkyd Air Drying and Baking Enamel.

.4 CAN/CGSB-51.34-M86, Vapour Barrier, Polyethylene Sheet, for Use in Building Construction.

.3 Ceilings and Interior Systems Construction Association (CISCA)

.1 Recommended Test Procedures for Access Floors 2007 Edition

.4 Environmental Choice Program (ECP).

.1 CCD-046-95, Adhesives.

.2 CCD-126-95, Construction Film (Polyethylene Plastic Film Product).

1.3 SYSTEM DESCRIPTION

.1 Design Requirements:

.1 Pedestals:

.1 Pedestal assembly to support a concentrated load of 22 kN without going out of alignment.

.2 Pedestals, when secured to subfloor, to resist a 0.09 kN force applied horizontally at top of pedestal.

.3 Ultimate load carrying capacity: not less than twice design strength.

.2 Stringers:

.1 Assembly to remain completely braced and rigid after a maximum of eight abutting panels are removed.

.2 Stringers to support a mid-span force of 0.66 kN.

.3 Floor Panels:

.1 Uniformly distributed load of 12 kPa: Maximum deflection of 1 mm.

.2 Concentrated load of 4.4kN applied over area of 25 x 25 mm at any location: maximum deflection of 2.54 mm.

.3 Rolling load of 2.2 kN on 76 mm diameter caster with bearing area of 1.27 mm^2 anywhere on panel without damage maximum deflection of 2.54 mm.

.4 Permanent deflection: maximum 0.5 mm at design load.

.5 Ultimate strength of the panel: provide safety factor of 3.0 times its design load without failure.

.4 Allowable Tolerances:

.1 Flatness of floor panels: plus or minus 0.5 mm in any direction.

.2 Surface Dimension: plus or minus 0.5 mm of all panels.

.3 Finished floor level tolerance: plus or minus 3 mm for overall floor, and plus or minus 1 mm in 2000 mm in any direction.

.4 Squareness: plus or minus 0.5 mm in surface dimension and 0.25 mm measured diagonally.

.5 Fire Resistance:

.1 Floor panels, less finished flooring: flame spread rating of 5; fuel contribution of 10 and smoke development of 15.

.6 Electrical Resistance:

.1 From surface of floor covering through to under structure shall not exceed 2 x 10^{10} ohms nor be less than 5 x 10^{5} ohms.

.7 Air Plenum Requirements:

.1 The access floor contractor is aware that the space beneath the access floor will be used as an air delivery plenum and as such will take the necessary precautions when installing their work so as not to impact the integrity of the plenum space specific to air leakage and cleanliness. Any penetrations or holes in the under floor plenum created for or resulting from the work performed by the Division 9 access flooring contractor are required to be properly sealed to prevent air leakage.

1.4 SUBMITTALS

.1 Product Data:

.1 Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 00 10 - General Instructions.

.2 Submit two copies of WHMIS MSDS - Material Safety Data Sheets to Departmental Representative:

.1 For caulking materials during application and curing.

.2 For adhesives.

.2 Shop Drawings:

.1 Take measurements from finished area at site. Indicate where applicable following information:

.1 Floor panel details and construction.

.2 Typical cutout details.

.3 Floor finishes.

.3 Samples:

.1 Submit samples in accordance with Section 01 00 10 - General Instructions.

.2 Submit one full size sample consisting of one (1) panel of complete access flooring system, including finishes.

.3 Submit duplicate samples of each type floor covering.

.1 Colour chips from manufacturer's standard range of colours for specified floor covering material.

.4 Incorporate approved samples into finished installation. Identify and note locations.

.4 Manufacturer's Instructions:

.1 Submit manufacturer's installation instructions.

.5 Manufacturers' Field Reports: submit copies of manufacturers field reports.

.6 Closeout Submittals:

.1 Provide operation and maintenance data for access flooring system for incorporation into manual specified in Section 01 79 00 - Demonstration and Training.

1.5 QUALITY ASSURANCE

.1 Certificates:

.1 Submit certification, to demonstrate compliance of the access flooring system to specification and specified standards by submitting:

.1 CSA or ULC certification.

.2 Government or independent testing agency test reports certifying that the product meets the standard.

.3 Letter of certification from a responsible official of the manufacturer.

.4 Method for testing access flooring in accordance with Ceilings and Interior Systems Construction Association (CISCA) standard test procedures. Have tests performed by an independent testing laboratory regularly engaged in testing of access floor components.

.2 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.

.3 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

.4 Pre-Installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements.

1.6 WASTE MANAGEMENT AND DISPOSAL

.1 Remove from site and dispose of packaging materials at appropriate recycling facilities.

.2 Collect and separate for disposal packaging material for recycling in accordance with Waste Management Plan.

1.7 MAINTENANCE

.1 Extra Materials:

.1 Provide 1 floor panel lifting device and wall mounting bracket for lifting device, standard with access floor manufacturer.

Part 2 Products

2.1 MATERIALS

.1 Access flooring, all areas: The only acceptable materials are Tate Access Floors, Inc. WC5000 Access Floor Panel, All Steel Panels, Bolt-Tite/ Snap-Tite Stringer Understructure.

.2 Panels:

.1 Steel floor panels: die formed, reinforced steel bottom plate welded to flat steel top plate and die cut to 610 x 610 mm size, bonderized and baked enamel finish, integral edge trim for plastic laminate finish.perforated floor panels: same size materials and construction as floor panels with 25% free area, quantity as indicated.

.3 Finish flooring:

.1 Melamine phenolic laminate: factory applied, 1.5 mm thick, designed for computer room floor panel use, Formica Cheyenne colour.

.2 Finish panel edges with integral trim Black IT colour.

.4 Stringers:

.1 Stringers: steel channel sections, galvanized finish, screw lock type.

.5 Fascia panels:

.1 Closure panels made up of:

.1 0.6 mm galvanized sheet steel.

.2 Include corner pieces, trim, reinforcing and fixing angles required.

.3 Finish to match floor panels.

2.2 FINISHES

.1 Metal finishes:

.1 Steel components:

.1 Exposed steel components: thoroughly clean surfaces, spray apply 1 coat CAN/CGSB-1.81 primer and two coats CAN/CGSB-1.88 type 2, gloss paint, colour to match existing. Individually bake each coat.

.2 Concealed steel components: 1 coat CAN/CGSB-1.81 baked primer.

Part 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

.1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 INSTALLATION

.1 Install components to system manufacturer's instructions.

.2 Provide new access floor panels as required to fill open areas where amplifiers cabinets have been removed.

3.3 CLEANING

.1 Perform cleaning after installation to remove construction and accumulated environmental dirt.

.2 Clean surfaces after installation using manufacturer's recommended cleaning procedures.

.3 Clean aluminum with damp rag and approved non-abrasive cleaner.

.4 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

3.4 PROTECTION

.1 Protect finished access floor with 0.15 mm thick polyethylene film, sealed at edges to prevent tearing.

END OF SECTION