

Section 1

Concentrated Load

Purpose:

To determine the maximum deflection(s) and permanent set(s) of an access floor under load.

Preparation:

1. Test shall be performed on three (3) randomly selected bare panel assemblies. (Four (4) panels are required if panel configuration is not structurally symmetrical.) Panels shall be placed on steel blocks or supports configured to provide support identical to that provided by an installed system. Any coatings, gaskets, pads, clips, fasteners, floor covering, or other materials as required by manufacturer shall be identical to an installed system. Blocks or supports shall not reduce the unsupported edge span below that normally provided with a standard installed system.
2. Panels designed for stringer support shall have stringers spanning the blocks or supports with panel perimeter support and/or interface in an identical manner to the configuration of the installed floor systems. Stringers shall be identical to those of the installed floor system, attached or fitted to the support blocks in an identical manner to the installed floor system, and shall include any coatings, gaskets, pads, clips, fasteners, finishes or other materials as required by the manufacturer in the installed floor system.
3. Height of the test mock-up shall be sufficient to accommodate deflections of stringers and panels and to allow for instrumentation.
4. Concentrated loading shall be applied to the structure through a steel indenter 1" (25.4 mm) square (if applicable, floor covering shall be removed at indenter location). This square indenter may have eased edges at maximum .008" (0.20 mm) radii, but the footprint contact area shall not measure more than 1" x 1" (25.4 mm x 25.4 mm). A round indenter (1.128" [28.65 mm] diameter) may be utilized in lieu of a square indenter provided the footprint contact area shall not exceed one square inch (645 mm²).

Test Procedure:

1. Each panel shall be loaded at its "weakest point," as determined by the Manufacturer's internal and /or independent /certifying testing agency to be the location which allows the greatest deflection under load. In addition to the "weakest point" panels shall be tested at the centroid and midpoint of edge. In the case of access flooring systems where panels are not contiguous, loads shall also be applied to the "weakest point" of the connecting material (e.g. steel cap) between panels.
2. Each panel shall be pre-loaded for each test to the test load at each location. A pre-load of 50 lb (222 N) shall

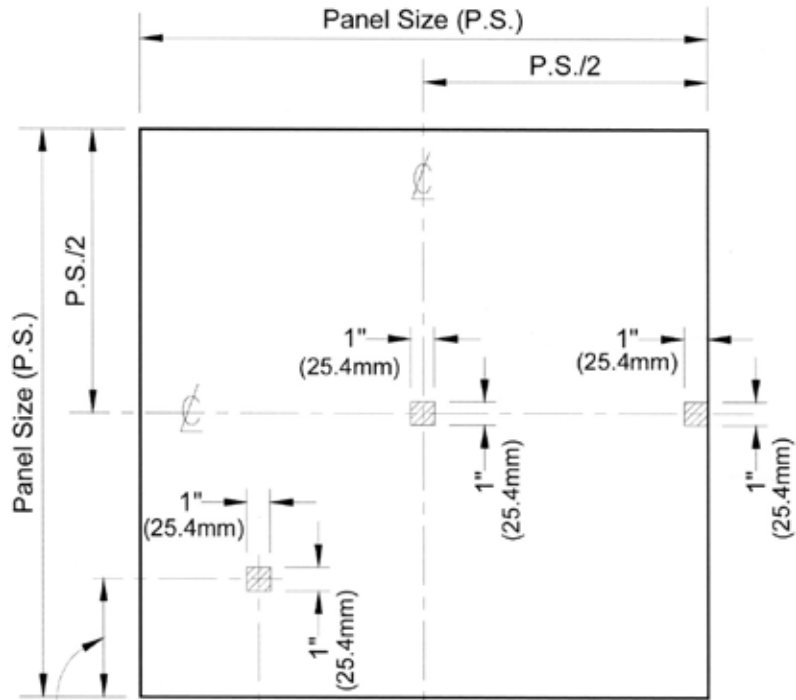
then be applied and the instrumentation measuring deflection and load shall be set at zero. (Reference zero = 50 lb [222N] pre-load)

3. Each panel shall be tested for each applied load location. After the pre-load each panel shall be tested at each applied load location by increments not exceeding 200 lb (890 N), with initial load no more than one-half test load. Rate of load application shall not exceed 1500 pounds per minute (6.675 kN/min).
4. Top surface deflection and permanent set shall be measured at each applied load location by recording indenter movement. For products with uneven bottom surfaces and where the deflection and set are measured on the bottom of the panel, the measurements shall be taken at the lowest adjacent horizontal surface.
5. Loads shall be applied at each location for a minimum of one (1) minute and deflection readings taken at the end of that period. The load shall then be relaxed to reference zero (Reference zero = 50 lb [222 N] pre-load) for a minimum one (1) minute and deflection shall be recorded.

Report:

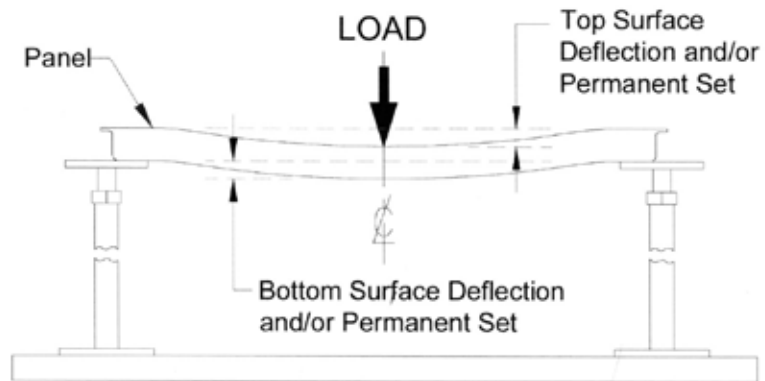
1. Reference of testing procedure described herein by CISCA A/F section number shall be included in report.
2. All apparatus, equipment, instrumentation, accuracy ranges, etc. shall be described including equipment calibration/certification dates.
3. Materials tested and mock-up configuration(s) should be fully described in verbiage or referenced to manufacturers drawings and/or part numbers, either containing the information:
 - Panels:
 - Material(s) of panel construction.
 - Weight, nominal dimensions and thicknesses.
 - Stringers:
 - Material(s) of construction.
 - Weight, nominal dimensions and thicknesses, including fasteners, gaskets, coatings, clips etc.
 - Other:
 - Fully describe gasketing, pads, other items utilized in the system.
4. Panel deflection measurements, of the top surface shall be reported to the nearest .001" (0.025 mm) for each applied load.
5. Panel permanent set of the top surface shall be reported to the nearest .001" (0.025 mm) for each applied load.

Section 1: – Panel Loading Locations



(Fig. 1A)

(Weakest Point)
This location to be determined
and reported by Testing Agency



(Fig. 1B)

SETUP FOR CONCENTRATED LOAD TEST

(Fig. 1)