

Section 4

Stringer Load Testing

Purpose:

To determine the amount of permanent set sustained by stringer when subjected to a concentrated load.

Preparation:

1. Stringers shall be randomly selected and supported on two pedestal assemblies complete with all coatings, gaskets, clips, and fasteners, identical to that found in the installed floor system. Height shall be equivalent to that found in a 12" (305 mm) finished floor height or the maximum height of the system, whichever is less.
2. The loads shall be applied to the stringer through a steel indenter 1" (25.4 mm) square, imposed and measured through a properly calibrated and appropriately sized load sensor. 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.

Test Procedure:

1. Load shall be applied vertically at mid span of the stringer and held for a minimum of one-minute duration. The load shall then be relaxed and permanent set measured. Permanent set shall be measured at the top surface of the stringer at the point of load application. Rate of load application shall not exceed 500 pounds per minute (2.224 kN/min).

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 or referenced to manufacturers' drawings and part numbers containing the following:
 - Material(s) of construction, weight, nominal dimensions and thickness
 - Span of stringer between pedestals center-lines
 - Height of system
 - Fasteners, gaskets, coatings, clips, etc.Record corresponding load(s) applied.
4. Description of any visual defects of any component.