

1.7 PERFORMANCE REQUIREMENTS

- A. Design Load: Panel supported on actual understructure (the system) shall be capable of supporting a safe working load or design load of 1250 lbs. This rating signifies that the system will withstand not only a concentrated load placed on a one square inch area at any location on the panel without yielding but also demonstrate the ability to withstand an overload capacity of two times its rating (i.e. a safety factor of 2).
- B. Concentrated Load : Panel supported on actual understructure (the system) shall be capable of supporting a concentrated load of 1250 lbs. placed on a one square inch area (using a round or square indenter) at any location on the panel with a maximum top surface deflection of 0.100 inches. Panel shall not exceed a permanent set of 0.100 inches, after the load is removed. (Important note: Although a concentrated load rating is often used to define an access floor performance, it does not represent the system's true performance as it is a panel test on steel blocks vs. actual understructure supports. Recommend using design load as a true indicator or system performance.)
- C. Safety Factor: Panel supported on actual understructure (the system) shall be capable of withstanding a minimum of (2) two times the design load anywhere on the panel without failure. Failure is defined as the point at which the system will no longer accept the load.
- D. Uniform Load: Panel supported on actual understructure (the system) shall be capable of supporting a uniform load of 400 lbs./ft² placed on the entire area of the panel without yielding and generating a permanent set of no more than 0.100" once the load is removed. Note: The uniform load rating of an access floor panel as specified herein should not be confused with the "uniform live load" as specified in seismic zone applications.
- E. Rolling Load: Panel supported on actual understructure (the system) shall be able to withstand the following rolling loads at any location on the panel without developing a local and overall surface deformation greater than 0.040 inches. Note: wheel 1 and wheel 2 tests shall be performed on two separate panels.
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| 1. | Wheel 1: Size: 3" dia x 1 13/16" wide | Load: 1125 lbs. | Passes: 10 |
| 2. | Wheel 2: Size: 6" dia x 2" wide | Load: 875 lbs. | Passes: 10,000 |
- F. Impact Load: Panel supported on actual understructure (the system) shall be capable of supporting an impact load of 150 lbs. dropped from a height of 36 inches onto a one square inch area (using a round or square indenter) at any location on the panel.
- G. Ultimate Load: Panel shall be capable of withstanding a concentrated load of 3750 lbs. applied onto a one square inch area (using a round or square indenter) at any location on the panel without failure. Failure is defined as the point at which the panel will no longer accept the load. Certified test report shall be provided attesting to this ultimate load.
- H. Panel Drop Test: Panel shall be capable of being dropped face up onto to a concrete slab from a height of 36", after which it shall continue to meet all load performance requirements as previously defined.