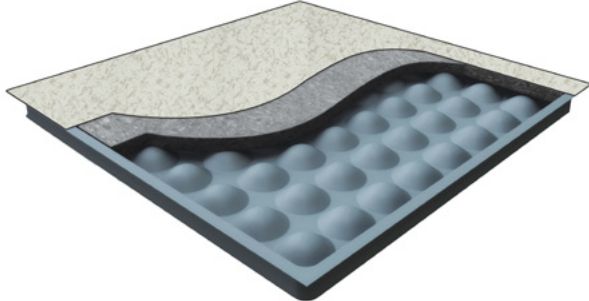


## UNITILE USF 1500 IT - HPL EDGE SUPPORT RIGID GRID (ESRG) SYSTEM

### PANEL ILLUSTRATION



|                      |   |
|----------------------|---|
| Category             | ESRG System, HPL, Integral trim               |
| Panel size           | 600 x 600 mm                                  |
| Core Material        | Cement  |
| Panel Core Thickness | 35 mm   |
| Panel Weight         | 17.280 kgs                                    |
| Weight of System     | 56 kgs /m2 for FFH 300mm (varies with height) |
| Overall Floor Height | 65 mm - 2000 mm                               |

### FEATURE BENEFITS

- Enhanced load-bearing capacity.
- Higher footprint area on pedestal head leading to enhanced stability & improved load carrying capacity.
- No overlapping of panels.
- Edge Support Design reduces the risk of damage to the panel edges during exposures to rolling and impact loads at site.

### PRODUCT STRUCTURAL PERFORMANCE

**Conforming to Master Specs 10270 / 096900 (USA) CISCA A/F, 'Recommended Test Procedures for Access Floors'**

|  |                     |
|--|---------------------|
| Concentrated Load (Point Load)<br>As per CISCA 2007      | 680 kgs (1500 lbf)  |
| Uniformly Distributed Load (UDL)<br>As per CISCA 2007    | 3100 kg/m2          |
| Ultimate Concentrated Load (As<br>per CISCA 2007)        | 1700 kgs (3750 lbf) |
| Rolling Loads (As per CISCA 2007)                        | 315 kgs (694 lbf)   |
| Stringer Loads (As per CISCA 2007)                       | 102 kgs (225 lbf)   |
| Pedestal Axial Load Test (As per<br>CISCA 2007)          | 22 kN               |
| Pedestal Over Turning Moment Test<br>(As per CISCA 2007) | 113 N x Meters      |

### SYSTEM DESCRIPTION

Unitile USF 1500 Integral trim (IT) Access floor panels are uniquely designed with hemispherical reinforcing pockets on the underside. This ensures structural strength, ultimate durability and acoustic performance.

The pedestal assembly shall provide easy adjustment of leveling and accurately align panels for a maximum  $\pm 25$  mm in the vertical direction. The Pedestal head assembly shall consist of embossed head mechanically riveted to a rolled formed stud and 2 check nuts for level adjustment and arresting vertical movement. The pedestal head shall consist of an anti-vibration PVC cap with inbuilt isolating spacers for Panel and stringer location.

The stringer shall be continuous box type, for strength, lateral stability, and for enhanced rolling loads performance and to support the panels on all four sides for alignment without leaving any gap at the pedestal head preventing air leakage.

All steel Components shall be Galvanized & Electro plated as per manufacturers offer systems & Standard.

### PANEL CONSTRUCTION

USF 1500 Access Floor panel is of size 600 x 600 mm, it is all steel welded construction with an enclosed bottom pan of hemispherical cones and the top plain sheet is fuse-welded at 144 locations to form a panel.

The hollow panels are pretreated and coated with electrostatically deposited powder coated 60 - 80 micron thick on all the exposed sides of the panel. The hollow core of the panel is injected with a light weight, fire retardant, noncombustible cementitious compound at high pressure to ensure support of not less than 90% of the top surface area of the panel.

The panel is then laminated with floor grade Antistatic Laminate on a semi-automated lamination line to ensure maximum bonding to the steel surface. The edges of the laminated panel should be an integral trim without beeding.

### APPLICATIONS

- Data Center
- Computer Room
- Server / Hub Room
- Switch Room
- Communication Room
- Control room

### FACTORY BONDED FINISHES

- HPL (1.2mm only)

## UNITILE USF 1500 IT – HPL EDGE SUPPORT RIGID GRID (ESRG) SYSTEM

### OTHER STRUCTURAL PARAMETERS

|                  |   |
|------------------|---|
| Soft body impact | Tested as per (T12.00) of MOB PF2 PS Standards  |
| Hard body impact | Tested as per (T13.00) of MOB PF2 PS Standards  |
| Fire rating      | Class O & Class 1, as per BS 476 Part 6 & 7, And also ASTM E84 1998 (Flammability) and ASTM E136 (Combustibility) |

### INSTALLATION TOLERANCE

|   |   |
|---|---|
| Overall level before application of any load      | ±1.5 mm over any 5.00 sq. mt.<br>±6 mm over any size of basic space   |
| Panel Level                                       | ±0.75 mm before the application of any load   |
| Panel Interchangeability installation and removal | Interchangeable (except for field cut panels) & replaceable in any of the four directions at 900 increments |

### ELECTRICAL RESISTIVITY

As per ASTM F150 /NFPA 99 Special Applications tested at 500 volts.

|                   |  |
|-------------------|--|
| Anti-static range | $1 \times 10^9 - 2 \times 10^{10}$ Ohms (surface to surface) |
|-------------------|--|

### FABRICATION TOLERANCE

|   |                           |
|---|---------------------------|
| Floor Panel Flatness                            | ±0.75 mm in any direction |
| Floor Panel Width or Length from specified size | ±0.50 mm                  |
| Floor Panel Squareness                          | ±0.38 mm                  |

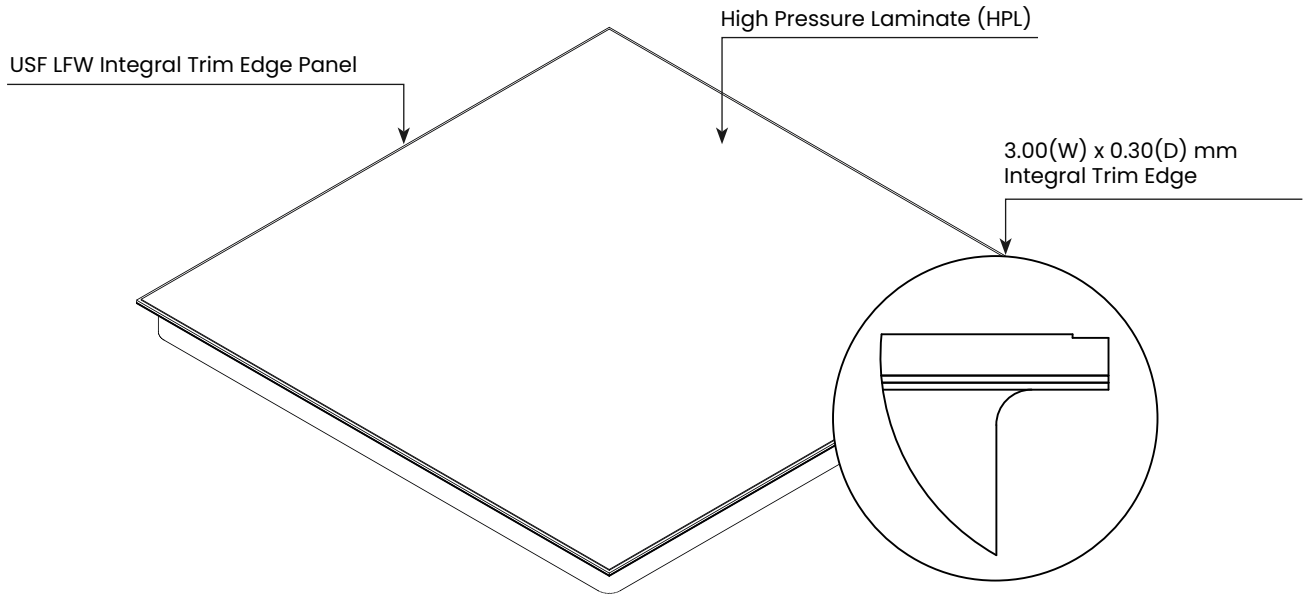
### SPECIAL APPLICATIONS

|                   |   |
|-------------------|---|
| Bridging Sections | Where obstructions prevent the use of pedestals   |
| Ramp Pedestals    | Pivot head pedestal to support angled ramp panels |

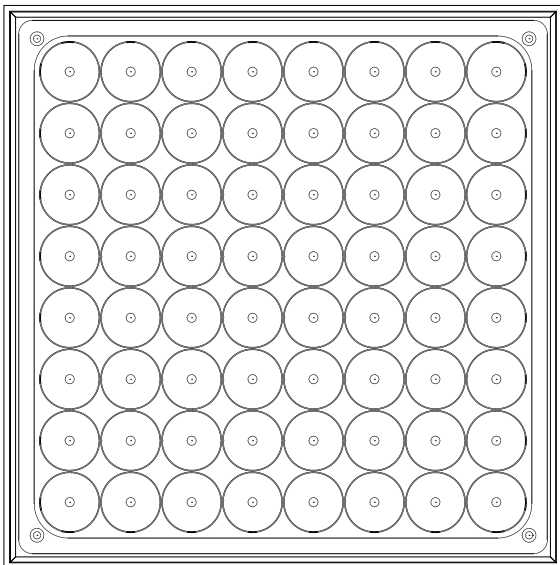
Note:

- The above mentioned loading parameters are derived & defined on the basis of the tests performed by the manufacturer based on the guidelines provided by the specified standards or as per manufacturer's recommendations.
- Manufacturer has all the rights to change or revise the specifications as and when applicable or required without the prior notice.

## PANEL CONSTRUCTION



## PANEL BOTTOM VIEW



## UNDERSTRUCTURE

