**UNITILE UCB 38mm - EDGE SUPPORT RIGID GRID (ESRG) SYSTEM**

**System Description:**

Unitile Chipboard access floor panels are engineered to fine dimensional tolerances for modular control, accurate alignment of grids and inter-changeability of panels and for prevention of creep.

A full depth ABS edge band provides total encapsulation of chipboard and protects the edge of surface covering to prevent ingress of moisture. Since electrical continuity is maintained through conductive gasket, the positive positioning and location of the floor panel onto the understructure is ensured.

**Pedestal:**

The pedestal assembly shall provide easy adjustment of leveling and accurately align panels for a maximum ± 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 conductive cap with inbuilt isolating spacers for Panel and stringer location.

**Stringers:**

The stringer shall be continuous box type, for strength, lateral stability, and for enhanced rolling load 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 Hot Dip Galvanized.

**Image**

Panel Illustration

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| **Category** | Edge Support Rigid System (ESRG) |
| **Core Material**  | Chipboard |
| **Panel Construction** |  |
| **Panel size** | 600 x 600mm |
| **Panel thickness** | 38 mm |
| **Panel Weight** | 12 Kg |
| **Weight of System** |  **37 kg/m2 for FFH 300mm (varies with height)** |
| Pedestal height | 150mm – 2000mm |
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**Panel Construction:**

The UCB floor panel of 38 mm nominal thickness consists of engineered 600 x 600 mm square modular panels constructed around a 38 mm high-density E1 chipboard core strengthened with high-performance thermosetting resins.

The top & bottom surface of the core is fully bonded and laminated by anti-static HPL / static dissipative /conductive vinyl & Al/ GI sheet respectively & then trimmed to fine dimensional tolerances for modular control, accurate alignment of grids, inter-changeability of panels and prevention of creep. The design incorporates a full depth ABS edge band, which, while providing total encapsulation of the chipboard core also protects the edge of the surface covering and resists ingress of moisture.

**Feature Benefits**

* High strength to weight performance
* Precision in floor levels and positive alignment with the understructure
* Good acoustical properties
* Unique In-built stringer design

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| **UCS 38 mm - Structural Performance: Raised access Floors (Full Access) as per BSEN 12825** |
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| **Classification** | **Deflection** | **Concentrated Load Kgs/ kN**  |
| Class A | 2.5 mm | 650 / 6.37 |
| Class B | 3.0 mm | 675 / 6.62 |
| Class C | 4.0 mm | 820 / 8.04 |
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| Ultimate Concentrated Load | 1680 Kgs / 16.47kN  |   |
| Uniformly Distributed Load Kg/m² | 2350 |   |

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| Stringer Load | 102 Kgs (225 lbf) |
| Pedestal Axial Load  | 22 kN |
| Pedestal Over Turning Moment  | 113 N x Meters |
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| **Other Structural Parameters:** |  |
| Soft body impact  | Tested as per (T12.03) of MOB PF2 PS Standards |
| Hard body impact  | Tested as per (T12.03) of MOB PF2 PS Standards |
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| **Application** |
| General Office | No |
| Training Room | No |
| Auditorium | No |
| Data Center | Yes |
| Computer Room | Yes |
| Server / Hub Room | Yes |
| Switch Room | Yes |
| Communication Room | Yes |
| Control room | Yes |
| Hotel | No |
| Library | No |
| Hospital  | No |

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| **Factory Bonded Finishes** |
|  | Available |
| Bare  | No |
| Modular Carpet | No |
| Marble/Stone/Vitrified | Yes |
| Vinyl  | Yes |
| HPL  | Yes  |

Note: If any

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

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| **Fabrication Tolerance** |
| Floor Panel Flatness | ± 0.75 mm in any direction |
| Floor Panel Width or Length from the specified size | ± 0.50mm |
| Floor Panel Squareness | ± 0.38 mm |

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| **Installation Tolerance** |
| Overall level before application of any load | ± 1.5 mm over any 5.00 Sq Mt.± 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) and replaceable in any of the four directions at 90º increments |

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| **Electrical Resistivity** - As per ASTM F150/ NFPA 99 / ANSI S7.1 / CEI 61340 but modified for the surface to the ground. Tested at 100/500 volts: |
| Conductive range | 2.5x104 - 1x106 Ohms (surface to ground) |
| Static dissipative range | 1x106 - 1x109 Ohms (surface to ground) |
| Anti-static range | 1x109 - 2x1010 Ohms (surface to surface) |