

UNITILE NEX-GEN 1200MMx1200MM

EDGE SUPPORT RIGID GRID (ESRG) SYSTEM

PANEL ILLUSTRATION



Category	Laminate/GI, ESRG System	
Panel size	600 x 600 mm	
Core Material	Calcium Sulphate	
Panel Core Thickness	34 mm	
Edge Band	PVC	
Panel Weight	21.160 kgs	
Weight of System	89 kgs / m2 for FFH 800 mm (varies with height)	
Overall Floor Height	450 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.
- Prevents fouling of cable tray systems with pedestals.
- Convenience of cable routing.
- Ease of post-handover maintenance for the lifecycle of the facility.
- Faster installations at site due to fewer pedestals
- Lesser obstruction to larger services running below floor (above 500 mm)

SYSTEM DESCRIPTION

Unitile Nex-Gen is a re-engineered raised access floor system re-engineered to overcome the challenges faced in data centers and control room environments.

The system has been designed to provide a wider span for cable management during the construction and the ease of maintenance post-handover of facility.

PANEL

Unitile Calcium Sulphate (UCS) access flooring panel is manufactured from fiber reinforced calcium sulphate which forms the core of the panel having density of 1400-1600 Kgs /mtr3. It offers excellent acoustical sound deadening value and a high degree of walking comfort ensuring perfect working environment. The panel also possesses electrostatic characteristics.

The top & bottom surface of the core is fully bonded and laminated by Antistatic High Pressure Laminate (HPL) and GI sheet respectively & then trimmed to fine dimensional tolerances for modular control, accurate alignment of the grids, interchangeability of panels and prevention of creep. The design incorporates a full depth Aluminium edge band, which while providing total encapsulation of the calcium sulphate core also protects the edge of the surface covering and resists ingress of moisture.

PEDESTAL

Pedestals installed to support the panel shall be suitable to achieve a specific finished floor height from the existing floor level and shall be placed 1200 mm distance in both directions to form a rigid grid of 1200 x 1200 mm. The pedestal design shall confirm speedy assembly and removal for relocation and maintenance. The Pedestal head assembly shall consist of a 147 x 147 x 3mm embossed Plus shape head mechanically riveted to a 19mm dia rolled formed stud of suitable length and 2 check nuts for level adjustment and arresting vertical movement. Pedestal diameter and base plate will be as per design load and clients requirement. Pedestal base shall be permanently secured in position on the subfloor by effective glue and screw/ anchor fasteners.

MAIN AND ANCILLARY RUNNERS

Main runner shall be of size $40 \times 80 \times 2 \times 1198$ mm (W x H x T x L) and secondary runner of size $40 \times 80 \times 2 \times 1158$ mm (W x H x T x L) which will form a grid of 1200 x 1200 mm. Third runner $40 \times 40 \times 1.2 \times 550$ mm (W X H X T X L) to provide a continuous support to calcium sulphate panel.



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PRODUCT STRUCTURAL PERFORMANCE (As per BSEN 12825)

Concentrated Load	1000 Kgs / 10.00 kN
Ultimate Concentrated Load	1900 Kgs / 19.00 kN
Uniformally Distributed Load (As per PSA MOB PF2 PS / CISCA)	3000 kgs / m2
Pedestal Axial Load Test	22 kN
Pedestal Over Turning Moment Test	113 N x Meters

OTHER STRUCTURAL PARAMETERS

Soft body impact	Tested as per (T12.03)
	of MOB PF2 PS Standards
Hard body impact	Tested as per (T13.03)
	of MOB PF2 PS Standards
Fire Rating	En1366 Part 6 : 2005 & En1366 Part 1 : 1999

INSTALLATION TOLERANCE

Overall level before application of any load	<u>+</u> 1.5 mm over any 5.00 sq mt. <u>+</u> 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 90° increments

ELECTRICAL RESISTIVITY

According to the procedure outline in NFPA 56A Chapter 462

Anti-static range	1x10° - 2x101º Ohms
	(surface to surface)

FABRICATION TOLERANCE

Floor Panel Flatness	<u>+</u> 0.75 mm in any direction
Floor Panel Width or Length	<u>+</u> 0.50mm
from specified size	
Floor Panel Squareness	<u>+</u> 0.38mm

APPLICATIONS

🗹 Data Center

Control Room

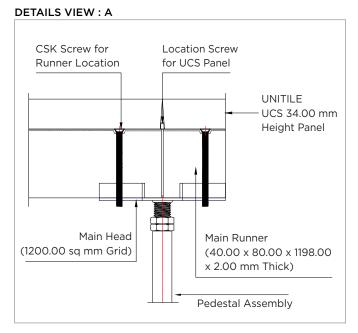
FACTORY BONDED FINISHES

HPL

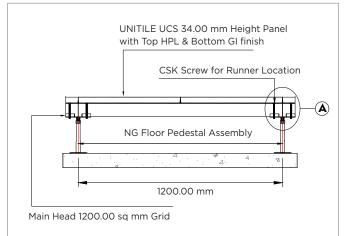
Note:

- 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.

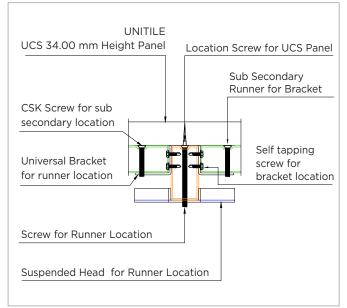
UNDERSTRUCTURE



FRONT VIEW

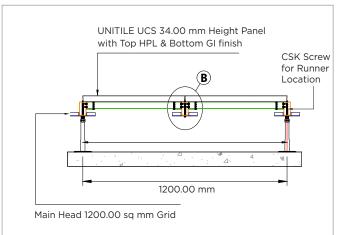


DETAILS VIEW : B



UNITILE

SECTION VIEW : "B-B"



PANEL CONSTRUCTION



