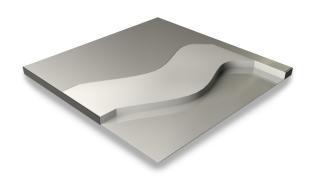


## **UNITILE CALCIUM SULPHATE (UCS) - BARE**

**GRAVITY LAY SYSTEM** 

### **PANEL ILLUSTRATION**



Category	Bare, Gravity Lay System
Panel size	600 x 600 mm
Core Material	Calcium Sulphate
Panel Core Thickness	34 mm
Panel Weight	20.3 Kgs
Weight of System	59 Kgs / m2 for FFH 300mm (varies with height)
Overall Floor Height	65 mm - 2000 mm

### **FEATURE BENEFITS**

- ▶ High strength to weight performance.
- Excellent fire resistance properties tested as per Class O and Class 1 standards.
- Precision in floor levels and positive alignment with the understructure.
- Good acoustical properties.
- Unique In-built stringer design.
- 90-97% UCS panels can be recycled at the end of their life.

### **APPLICATIONS**

General Office

### **FACTORY BONDED FINISHES**

✓ Bare

Carpet

### SYSTEM DESCRIPTION

#### PANEL: \_\_

Unitile Calcium Sulphate (UCS) access flooring system is manufactured using calcium sulphate core of 34 mm thickness having a very high density of 1700 Kgs /mtr3 of Natural gypsum. The panel is designed in a way it offers excellent acoustical sound deadening value, also offers a high degree of walking comfort ensuring perfect working environment. The panel also possesses electrostatic characteristics.

The panels are designed with pre-engineered cavity on all four corners to inter-lock with the pins on the PVC cap that leads to positive engagement between the pedestal and access floor panel. The factory-engineered Inter-locking design of the panel and the PVC cap enables positive alignment of the floor without any efforts during the installation and frequent access during service.

### PEDESTAL: \_\_\_

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 1 check nut 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.

### PANEL CONSTRUCTION

The UCS floor panel is manufactured from 1700 kg/mtr3 fiber reinforced calcium sulphate, which forms the core of the panel. Non- combustible high quality alphahemihydrate single pressed gypsum and non-toxic unbleached cellulose fibers are used as reinforcing material. The core is manufactured using a unique technique of compressing multiple layers of natural gypsum to guarantee homogenous density across the panel and have high resistance to water absorption.

The top & bottom surface of the core is fully bonded and laminated by aluminium foil & 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 ABS 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



# **UNITILE CALCIUM SULPHATE (UCS) - BARE**

**GRAVITY LAY SYSTEM** 

# PRODUCT STRUCTURAL PERFORMANCE (As per BSEN 12825)

	CLASSIFICATION	DEFLECTION	CONCENTRATED LOAD
	Class A	2.5 mm	550 Kgs / 5.39 KN
	Class B	3.0 mm	660 Kgs / 6.47 KN
	Class C	4.0 mm	810 Kgs / 7.94 KN

## PRODUCT STRUCTURAL PERFORMANCE

Ultimate Concentrated Load	1250 Kgs / 12.25 KN
Uniformally Distributed Load (As per PSA MOB PF2 PS)	1377 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 (T12.03)	
	of MOB PF2 PS Standards	
Fire Rating	Class O & Class 1, as per BS 476 Part 6 (Fire Propagation) & 7 (Surface spread of flame). Rated REI 30 as per 1366-6 under BSEN 13501-2.	

## **INSTALLATION TOLERANCE**

Overall level before	<u>+</u> 1.5 mm over any 5.00 sq mt.
application of any load	<u>+</u> 6 mm over any size of basic space
Panel Level	+ 0.75 mm before the application
	of any load
Panel Interchangeability	Interchangeable (except for field
installation and removal	cut panels) & replaceable in any
	of the four directions at
	90° increments

## **FABRICATION TOLERANCE**

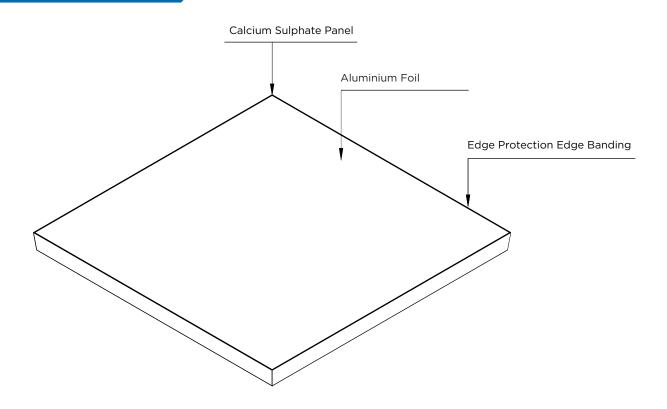
Floor Panel Flatness	± 0.75 mm in any direction
Floor Panel Width or Length	<u>+</u> 0.50mm
from specified size	
Floor Panel Squareness	<u>+</u> 0.38mm

## **SPECIAL APPLICATIONS**

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

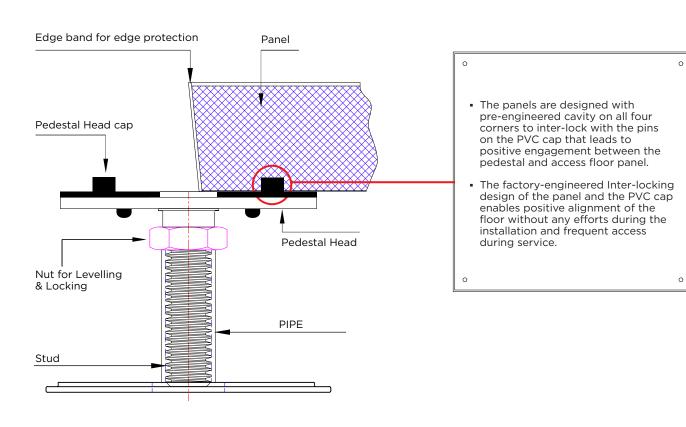


### PANEL CONSTRUCTION



## **UNDERSTRUCTURE**

## PANEL BOTTOM VIEW



PANEL FRONT VIEW