



STEEL CEMENTITIOUS HPL RIGID GRID SYSTEM

RECOMMENDED APPLICATIONS



DATA CENTRES



SERVER ROOMS

SYSTEM NAME

Steel Cementitious HPL Rigid Grid System

SYSTEM CODE

SC-RG-HPL

COMPLIANT STANDARDS

 Australian Standard AS4154/AS4155
 Australian Standard AS1170
 CISCA Standard UFGS-09 69 11/15
 PSA MOB PF2 1992
 NATA Testing Certification
 ISO9239-1-2003
 EN12825-2001
 DIN4102-1-1998

DESCRIPTION

The Steel Cementitious HPL Rigid Grid System has been designed for Computer/Data Centre environments.

It can be used for mapping and distributing cabling, data and other electrical services in the sub floor.

The SC HPL System has a 1.6mm thick anti-static HPL covering.

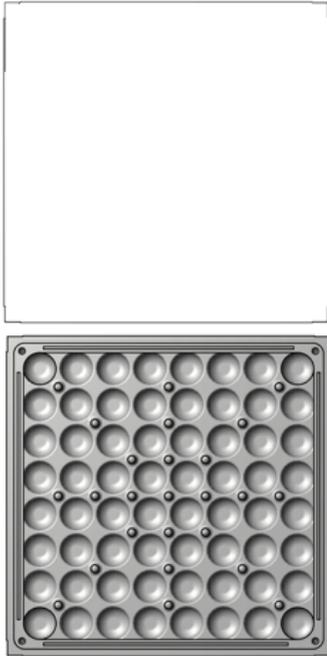
The HPL protects individuals from voltage shorts that can occur with electrical equipment on an access floor and also creates an electrostatic discharge which helps prevent buildup of the static electricity which can cause damage to the equipment.

SPECIFIERS GUIDE

The adjacent table details how to nominate the ASP Steel Cementitious HPL Rigid Grid System in your project specification.

SYSTEM NAME	Steel Cementitious HPL Rigid Grid System
SYSTEM CODE	SC-RG-HPL
PANEL LOAD TOLERANCE	e.g. AS Heavy Grade 4.5kN
PANEL FINISH	High Pressure Laminate Colour 8192
FINISHED FLOOR HEIGHT (FFH)	e.g. 150mm

ACCESS FLOOR PANEL



TYPE	SC Series – Steel Cementitious
SIZE	The panels are 600mm x 600mm in size and are interchangeable with other panels. Also available are a series of load bearing finishing panels designed to minimise small off cuts experienced when cutting around columns, curved building designs and finishing off near perimeter walls. These finishing panels come in 600 x 800mm and 600 x 300mm sizes.
DEPTH	33mm
CONSTRUCTION	The panels consist of a hardened steel top and bottom sheet plate with corrosion resistant protection, inside and out, encapsulating a structural cementitious core.
CORE	Cementitious Compound
TOLERANCE	±0.25mm and a flatness tolerance of ±0.5mm measured on a diagonal across the top of the panel
FINISH	Anti-static 1.6mm 'high pressure laminate' surface finish.
CONNECTION	The panel is gravity held in a rigid grid understructure

PANEL LOAD TOLERANCES

AUSTRALIAN STANDARD (AS)

LOAD LEVEL	PANEL (KG)	SYSTEM (KG/M ² at 150mm FFH)	STATIC PERFORMANCE (kN)			DYNAMIC PERFORMANCE (kN) - Passes			
			CONCENTRATED	IMPACT	ULTIMATE	10 (WHEEL SIZE 75X30MM)	10,000 (WHEEL SIZE 150X50MM)	40,000 (WHEEL SIZE 200X75MM)	UNIFORM (kPa/m ²)
Heavy Grade 4.5kN	14.2	43.55	4.5	0.4	13.5	4.4	3.3	2.25	N/A
Extra Heavy Grade 6.0kN	15.5	47.16	6.0	0.4	18.0	5.5	4.4	2.25	N/A

Safety Factor: Panels must provide a minimum safety factor of 3 times the concentrated load specified above in accordance with AS4154-1993.

CISCA STANDARD

LOAD LEVEL	PANEL (KG)	SYSTEM (KG/M ² at 150mm FFH)	STATIC PERFORMANCE (kN)			DYNAMIC PERFORMANCE (kN) - Passes			
			CONCENTRATED	IMPACT	ULTIMATE	10 (WHEEL SIZE 75X30MM)	10,000 (WHEEL SIZE 152X51MM)	40,000 (WHEEL SIZE 200X75MM)	UNIFORM (kPa/m ²)
Heavy Grade 4.45kN (1000LBS)	14.3	43.82	4.45 (1000LBS)	0.67 (150LBS)	6.23 (1400LBS)	3.56 (800LBS)	2.67 (600LBS)	N/A	11.97 (250psf)
Extra Heavy Grade 5.56kN (1250LBS)	15.2	46.32	5.56 (1250LBS)	0.67 (150LBS)	8.01 (1800LBS)	4.45 (1000LBS)	3.56 (800LBS)	N/A	14.36 (300psf)
Industrial Grade 6.67kN (1500LBS)	17.6	52.99	6.67 (1500LBS)	0.67 (150LBS)	11.12 (2500LBS)	5.56 (1250LBS)	4.45 (1000LBS)	N/A	16.76 (250psf)
Heavy Industrial Grade 8.9kN (2000LBS)	19.1	57.15	8.9 (2000LBS)	0.67 (150LBS)	12.45 (2800LBS)	6.67 (1500LBS)	5.34 (1200LBS)	N/A	19.15 (400psf)
Super Industrial Grade 11.12kN (2500LBS)	20.0	59.65	11.12 (2500LBS)	0.67 (150LBS)	13.79 (3100LBS)	8.89 (2000LBS)	7.11 (1600LBS)	N/A	23.94 (500psf)

Safety Factor: Panels must provide a minimum safety factor of 5 times the uniform load specified above in accordance with ICC-ES AC300.

PSA MOB STANDARD

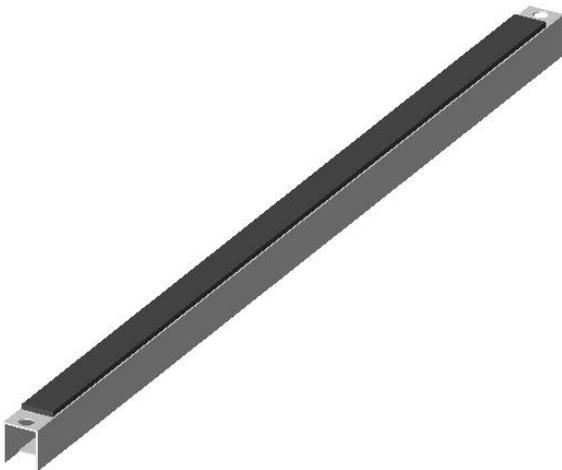
LOAD LEVEL	PANEL (KG)	SYSTEM (KG/M ² at 150mm FFH)	STATIC PERFORMANCE (kN)		
			CONCENTRATED	IMPACT	UNIFORM (kN/m ²)
Heavy Grade 4.5kN	14.1	43.27	4.5kN	0.4	12.0

Safety Factor: Panels must provide a minimum safety factor of 3 times the concentrated load specified above in accordance with PSA MOB PF2 1992.

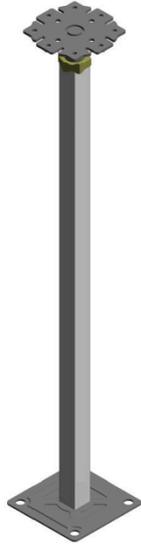
UNDERSTRUCTURE



ACCESS FLOOR STRINGERS



TYPE	SG6 Stringer
SIZE	600mm.
CONSTRUCTION	The steel stringers shall be 31mm x 21mm x 1.4mm rectangular welded tube. The stringers shall be provided with a 3mm sponge rubber foam to provide sound absorbing buffer between the stringer and the panel.
FINISH	Galvanized steel.
CONNECTION	The stringer is screw fixed to the pedestal head.

FLOOR PEDESTALS
**FINISHED
 FLOOR HEIGHT
 (FFH)**
PEDESTAL
S8


FFH 110 - 1200mm

S11


FFH 1200+

SIZE	10,000mm ² base plate
CONSTRUCTION	Steel pedestal base and nickel chrome plated head assembly with a zinc electro-plated rod.
LOCKING	The pedestals will be provided with an adjusting and locking nut to maintain the assembly at a selected height, which requires a deliberate action to change the height setting, and which prevents vibration displacement.
FINISH	Nickel chrome plated head assembly with a zinc electro-plated rod
CONNECTION	The panel is screw fixed to the pedestal head at all four corners
FINISHED FLOOR HEIGHT (FFH)	The finished floor height of the access floor is measured from the sub-floor to the top surface of the installed access floor.