

# **WOODCORE PANEL**

## **Wood Core Rigid Grid System (WC25)**

<b>CONCENTRATED LOAD:</b>	: 4.5 kN (1000 lbf)
<b>UNIFORM DISTRIBUTED LOAD:</b>	: 12 kN per M <sup>2</sup> (250 lb per sq ft)
<b>IMPACT LOAD:</b>	: 0.40 Kn (90 lbf)
<b>ROLLING LOAD 10,000 PASSES:</b>	: 3.3 Kn (740 lb)
<b>FIRE PROTECTION:</b>	: Class "O" BS 476 : 1968
<b>GENERAL CONSTRUCTION:</b>	: Woodcare 25mm cladded with galvanized steel sheet

## **Wood Core Rigid Grid System (WC25G)**

<b>CONCENTRATED LOAD:</b>	: 3.0 kN (670 lbf)
<b>UNIFORM DISTRIBUTED LOAD:</b>	: 8.0 kN per M <sup>2</sup> (165 lb per sq ft)
<b>IMPACT LOAD:</b>	: 0.40 Kn (90 lbf)
<b>ROLLING LOAD 10,000 PASSES:</b>	: 2.7 Kn (600 lb)
<b>FIRE PROTECTION:</b>	: Class "O" BS 476 : 1968
<b>GENERAL CONSTRUCTION:</b>	: Woodcare 25mm cladded with galvanized steel sheet



## 1 The System in General

- 1.1 The system shall be WC25 Rigid Grid System consisting of modular square panels, stringers and pedestals. the Rigid Grid or the framework shall be formed by galvanized stringers and pedestal assemblies carefully bolted at 600 mm centres. Modular square panels shall then be supported equally along the edges of the Rigid Grid. Bolting down the modular square panel to the Rigid Grid is not recommended.
- 1.2 The main components of the system shall be as follow:-a. Modular square panel clad with galvanised steel sheet 600mm x 600mm x 25mm nominal thick and comply to the loading requirement as specified, b. Galvanised steel stringers 1800mm and 600mm nominal lengths, c. Pedestal assemblies,
- 1.3 The weight of the modular square panel shall not exceed 16kg per piece and therefore shall be easily removed by one person with a lifting device. These modular square panels shall be interchangeable in all respect unless being cut for a particular position or purpose
- 1.4 The stringers forming the Rigid Grid shall be bolted with M6 thread-size screws in electro-zinc plated finish to the pedestal assemblies. The stringers shall be 1800mm and 600mm nominal lengths and the former shall span 3 panels width to achieve better strength and stability.
- 1.5 The system when completed shall be sturdy, rigid and free of rattles, squeaks and other vibrations. The floor shall achieve to an overall flatness of within 1.5mm over any area of 5M: and within 6.0mm over any size of the enclosed space. It shall also be capable of accepting a concentrated load as specified over an area of 6 25cm square.
- 1.6 The Rigid Grid System shall be constructed to a specified height with 30mm plus minus vertical adjustment.

## 2 Panels

- 2.1 The modular square panel shall be 600mm x 600mm with manufacturing tolerance within 0.5mm All edges are sealed with hard PVC trim in grey colour and with mitred corner joints. NO PVC trim for bare panels.
- 2.2 The modular square panel shall consist of the following parts:-a, 25mm thick structural woodcore to comply to MS1036 1986 TYPE III, improved moisture resistant board. b. A die form steel trough of 20mm depth and a top flat sheet, both 0.6mm thick, bonded to the woodcore, c. Hard tapered PVC edge trim along the sides of the woodcore.

These parts are structurally laminated together by double gluing method using approved heat resistant adhesive to be specified and used under the manufacturer's instruction.

- 2.3 The edges of the panel are protected with hard PVC trimmings. These trimmings are chemically bonded with approved adhesives.
- 2.4 The modular square panel shall be capable of discharging static electricity transversely, as specified i.e.:-a. 'anti-static' performance shall be within  $1 \times 10^7 - 2 \times 10^8$  ohms. b. 'dissipative' performance shall be within  $1 \times 10^7 - 1 \times 10^9$  ohms. c. 'conductive' performance shall be within  $0.25 \times 10^7 - 1 \times 10^7$  ohms.
- 2.5 The modular square panel shall be clad with an approved galvanized steel sheet\_
- 2.6 Floor covering as specified shall be laminated to the panel by double gluing method using an approved adhesive system being selected by the manufacturer Floor covering would not peel from the panel or create any formation of air cavity under normal usage or under specified environmental conditions.



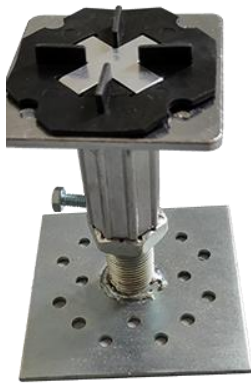
*Woodcore panel c/w vinyl finishing*



*Woodcore panel c/w HPL finishing*

### 3 Pedestal Assembly

- 3.1 Pedestal assembly shall consist of:-a. pedestal head complete with self-locking device b\_ pedestal base of a specified height.
- 3.2 Pedestal head shall be fabricated from either steel die form plate or an ADC 12 alloy, pressure die cast aluminium, consisting M6 thread size tapped holes and a 22mm diameter shaft for vertical adjustment. It shall be self-locked into the pedestal base by forces of gravity and restraint with a M6 hexagonal bolt.
- 3.3 Pedestal base shall consist of a threaded M22 diameter steel tube welded to a die formed base plate of 100mm square and with minimum thickness of 3,0mm. A dimple hexagonal nut shall be used for vertical levelling.
- 3.4 Pedestal assembly shall be supplied in electro-zinc plated finish and during installation, the base of the pedestal shall be glued to the sub-floor with fillet adhesive. The type of fillet adhesive and its usage shall be recommended by the manufacturer.



*Gridless system*



*Rigid grid system*

### 4 Stringers

- 4.1 Stringers shall be manufactured from galvanized steel to comply to JIS 3313:1979 and its thickness shall be 1,2mm. Stringers are manufactured to 1800mm and 600mm nominal lengths, and with a minimum sectional dimension of 25mm x 30mm and bent 4 times.
- 4.2 Stringers shall be fastened to the pedestal assembly with M6 thread-size Philip-head machine screws in ECP finish. Each 600mm length stringer shall consist of 2 nos punch-out stoppers to correctly locate the panel in position.
- 4.3 The top of the stringer shall be covered with an approved sound deadening material.

