



ACCESS FLOOR SYSTEMS

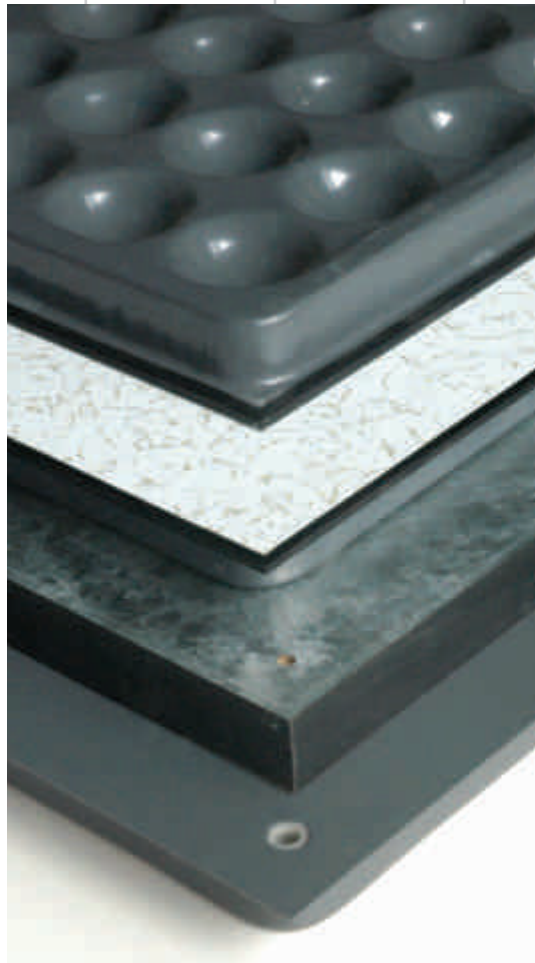


SOLE DISTRIBUTOR IN INDIA

TIME

QUALITY

SERVICES



PERFECT SOLUTION FOR ACCESS FLOOR SYSTEMS





#### **Kebao :**

Kebao International Industrial (Group) Limited a leading manufacturer of 'Access Floor Systems', located at the East Changzhou, Jiangsu Province, near Shanghai in China with it's HO at Hongkong.

The Company has three completely integrated & automated manufacturing factories of steel-cement infill access floor system with a capacity of 500,000 Sq.Mtrs per year. The Company also manufactures wood core & calcium sulphate false floor systems with total understructure & accessories.

KEBAO an ISO 9001:2000 certified company, manufactures it's products in complete compliance to various international standards like CISCA of USA, MOB of UK and SJ/T 10796-2001 of China. It finds approval from PSB Singapore and the 'Chinese Electrostatic Discharge Protection Product Quality' checking centre (MII TESTING).

KEBAO finds acceptance in the USA, Europe and all of ASIA.

#### **Inner Space:**

A Mumbai based company is engaged in the business of large & medium scale 'False Flooring & False Ceiling' systems as well as 'Turnkey' interior work installations, since a good 20 years.

It is the sole importer cum distributor of **KEBAO Access Floor systems** (since 2000) and has added the latest concept of '**Toilet Cubicles**' brought to the market by a pan India dealer network & also neighboring countries. Logistics are taken care by way of captive warehouses and secured transport facilities backed by an on the move & technically correct installation team.

Inner Space serves a wide customer profile comprising of large & medium sized companies from the software, telecom, power, finance, refineries and other cutting edge engineering sectors, plus companies engaged in the business of developing Malls & public spaces.

#### **Products:**

Kebao offers a range of international quality access floor systems –

- 1. Steel-Cement (foamed cement) infill panels**
- 2. Hollow steel panels**
- 3. Wood core panels**
- 4. Calcium Sulphate core panels**
- 5. Understructure & Accessories**

All the above are available with a variety of surface finish options comprising of 'high pressure' anti-static laminates or conductive PVC (tile) surface along with conductive PVC trims on all four sides or simply bare tiles, ready to receive carpet tiles. Understructure frame components like 'pedestals' & 'stringers' are made of zinc plated steel or hot dipped galvanized steel as per specification.

Kebao products are able to meet the exacting standards of structural / mechanical / architectural engineering, including acoustics, thermal conductivity and fire retardancy along with an eye on décor & aesthetics.

#### **Application:**

The "Kebao" access floor system is recommended for Data Centers, Server / UPS / HUB Rooms, Mobile Switch Rooms, Telephone Exchanges, Control Rooms, Power Plants, Banks, Laboratories, Offshore Platforms, Refineries, Steel Plants, Atomic Stations, Gas Terminals and network intensive Corporate buildings & offices.

#### **Installation :**

The installation area must be hard, flat and free from any dust & moisture, ideally finished with epoxy paint. First the pedestal marking is done to allow the user to correctly lay all the under floor utilities like cables, piping, trays, control panel frames, etc. Once done the entire system (understructure & tile) is installed at one go, the cut pieces (ends/corners) are fixed, finally leveled before the pedestals are reinforced by means of epoxy adhesive or anchor fasteners.

Tiles can be cut at site for creating wire/cable openings as and where required. It is advised that for subsequent maintenance, only 'Vacuum Panel Lifters' be used for lifting & gaining access to the under-floor.



Precision Equipments



High-Tech Line



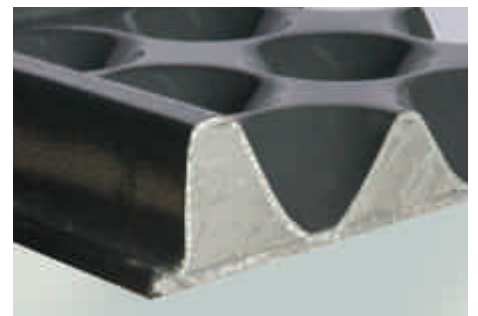
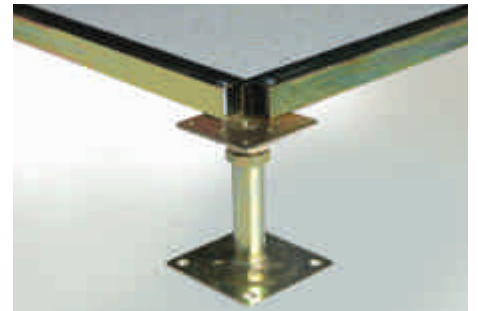
Accuracy



## Laminated Steel-Cement Tile (Rigid Grid Type)

Made using high grade cold rolled steel sheets, top & bottom plates are combined with 100 spot welds and the resulting cavity is filled with foamed cement for solid load bearing capacity. Epoxy based powder coating is done on all sides of the tile to ensure long life. The top surface is finished with high-pressure antistatic laminate or PVC. All the four edges are covered with black conductive edge band for good conductivity. The finished surface of the tile is 'anti-skid'. These tiles are placed on a steel understructure formed of pedestals & stringers (rigid grid type) at the required height. The entire system is fire retardant and non-combustible and is available in different grades suitable for low and high weight requirements. The panels can be interchanged anywhere and in any direction.

*Ideal for - Control /Server /UPS / HUB rooms, Switch rooms, Data centres, etc.*



Model No.	Size (mm)	Point Load (Kg)	Uniform Load (Kg)	Ultimate Load (Kg)	Roll Load Kg 10000-10times	Impact Load (Kg)
HDG 6006 HPL (FS-700)	600 x 600 x 30	> 300	> 1250	> 900	230-300	> 65
HDG 6008 HPL (FS-800)	600 x 600 x 35	> 360	> 1600	> 1080	270-360	> 70
HDG 6010 HPL (FS-1000)	600 x 600 x 35	> 450	> 2300	> 1350	360-450	> 75
HDG 6012 HPL (FS-1250)	600 x 600 x 35	> 560	> 3300	> 1680	450-560	> 80
HDG 6015 HPL (FS-1500)	600 x 600 x 35	> 670	> 4300	> 2010	560-670	> 85

\* Wear resistance of laminate is  $< 0.08 \text{ gm/cm}^2$ , \* Antistatic property of laminate  $10^6 - 10^{10} \Omega$  \* Conductive PVC Properties  $10^4 - 10^5 \Omega$ , as per china standard - SJ/T11 236-2001.

\* Load testing Standard: SJ/T 10796 2001 China, General specification for raise access floor for electrostatic protection. (Deflation less than 2.00mm). \* Fire standard: as per BS476 part 4:1917 for panels (non combustible material).

Note :- Loading chart given is as per Chinese standard, the parameter in different countries are different as per the local standard. It is recommended to test the performance v/s requirement prior to installation or contact us for further information.

## Bare Tile – (Corner Lock System)

The latest concept in false flooring for large tech savvy open offices for managing different services like power, data / voice cables, fire pipes, under floor HVAC systems, etc. The system consists of steel/cement tile, pedestals & PVC caps (stringer less). The tiles are locked (fastened) at all four corners, to the pedestal, by means of high tensile screws from the top. Anti-vibration PVC caps are placed between the tile & pedestal which not only restrict the noise level but are comfortable to walk over as well. The advantage of this system is, it can be directly installed on the RCC slabs of new buildings with the minimum height as low as 100mm (to save on precious ceiling height). Carpet or PVC tiles can be used as a surface finish.

*Ideal for – Large open offices.*



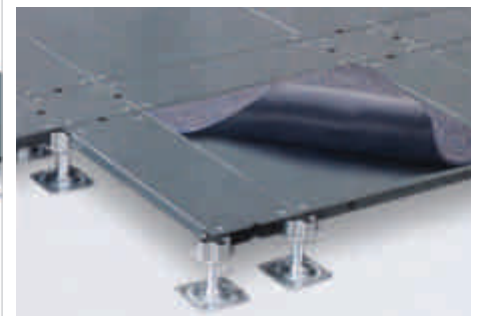
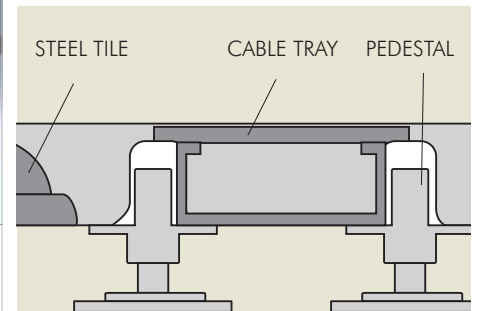
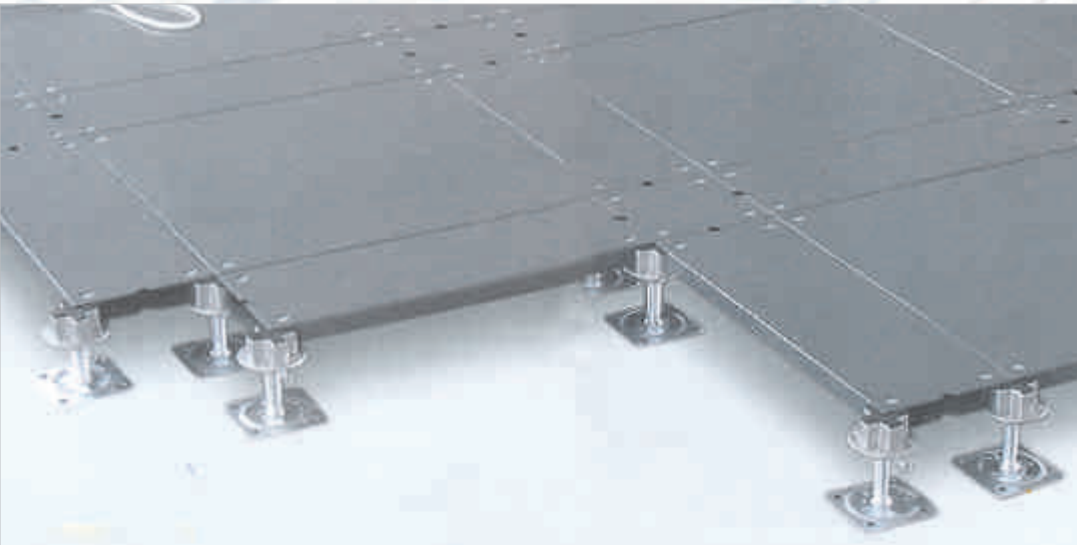
Model No.	Size (mm)	Point Load (Kg)	Uniform Load (Kg)	Ultimate Load (Kg)	Roll Load Kg 10000-10times	Impact Load (Kg)
HDG 6006 CL (FS-700)	600 x 600 x 33	> 300	> 1250	> 900	230-300	> 65
HDG 6008 CL (FS-800)	600 x 600 x 33	> 360	> 1600	> 1080	270-360	> 70
HDG 6010 CL (FS-1000)	600 x 600 x 33	> 450	> 2300	> 1350	360-450	> 75
HDG 5006 CL (FS-700)	500 x 500 x 28	> 300	> 1250	> 900	230-300	> 65
HDG 5008 CL (FS-800)	500 x 500 x 28	> 360	> 1600	> 1080	270-360	> 70

Note :Load testing standards and other details as per page 3.

## Net Floor - (Bare Low Lock Type)

The system is similar in specification to the 'Corner lock type'. As a difference, thick steel trays with a top cover measuring 100mm or 150mm in width are placed between two access floor panels and fixed on the pedestal (aluminum die cast head) like a tile. All service cables such as voice, data & power are run systematically through this tray, which can be placed at specific locations to allow direct entry in to workstation partitions above the floor. Isolation of power & data cable is also possible by putting two rows at a distance. Installation and maintenance of is made easy by way of an openable flap from the topside eliminating the need to open the access floor panel. One can avoid the conventional way of cable trenching & junction boxes using this system, as it costs less & saves time too. The advanced features of this system allow the user to manage various cables running throughout the office in a systematic way directly co-related to the office layout.

*Ideal for – Large open offices.*



Model No.	Size (mm)	Point Load (Kg)	Uniform Load (Kg)	Ultimate Load (Kg)	Roll Load Kg 10000-10times	Impact Load (Kg)
HDG 6006 NT (FS-700)	600 x 600 x 33	> 300	> 1250	> 900	230-300	> 65
HDG 6008 NT (FS-800)	600 x 600 x 33	> 360	> 1600	> 1080	290-360	> 70
HDG 6010 NT (FS-1000)	600 x 600 x 33	> 450	> 2300	> 1350	360-450	> 75
HDG 5006 NT (FS-700)	500 x 500 x 28	> 300	> 1250	> 900	230-300	> 65
HDG 5008 NT (FS-800)	500 x 500 x 28	> 360	> 1600	> 1080	270-360	> 70
Cable Tray	100 & 150mm					



# Wood Core & Calcium Sulphate Flooring System

## Wood Core :

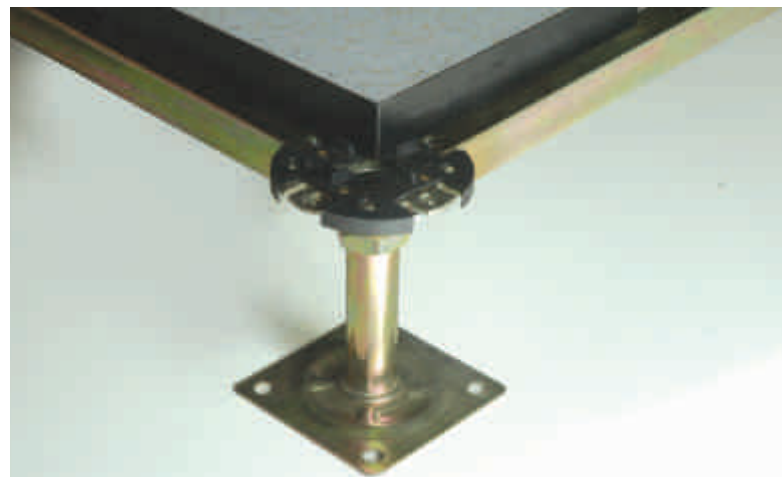
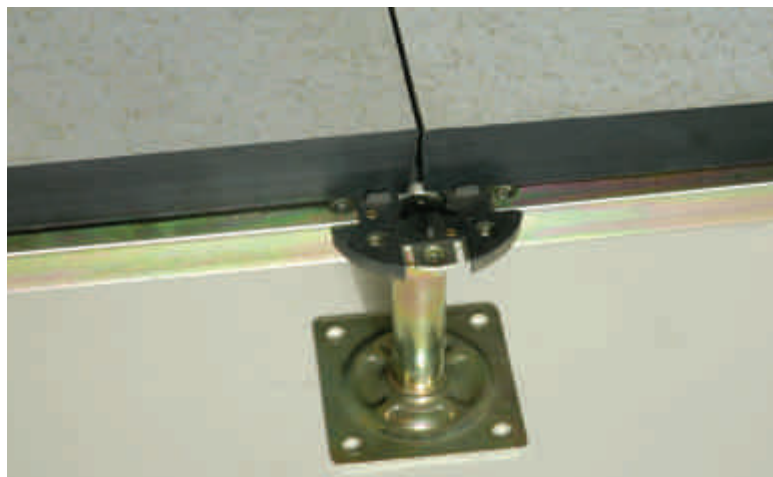
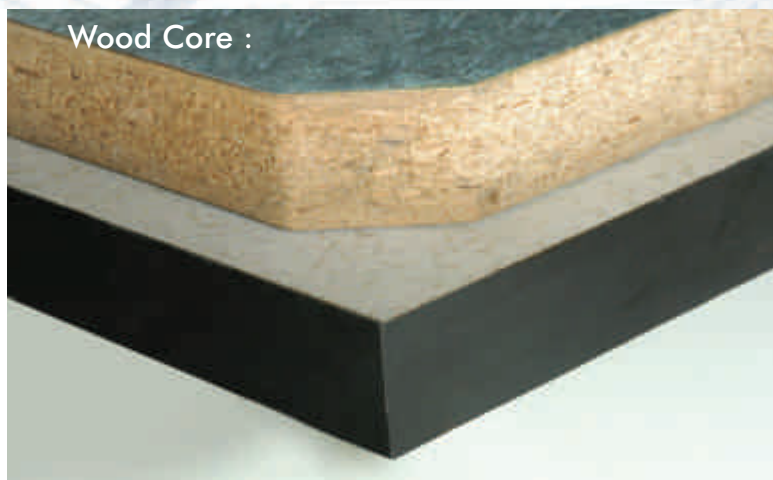
This is a lightweight panel preferred for areas where specified self-load requirement is less. The panels are made using high-density chip-board, the bottom is clad with 0.5mm G.I. or aluminum sheet while the top is finished with antistatic laminate or PVC. Four sides of the tile are covered with conductive black PVC stripes. In case of bare panel, both top & bottom sides are covered with 0.5mm G.I. or aluminum sheet. The panels are rested on rigid grid system of steel pedestals & stringers. Bare panels are also available in corner lock type and can be finished with antistatic carpet or PVC tiles. The wood core as an inherent property provides good sound absorption (footstep noise, etc).

*Ideal for – Large open office spaces requiring low self load / Studios.*

## Calcium Sulphate Core :

These panel cores are made out of high-density calcium sulphate material bonded with resins. They provide excellent load bearing capacity & very high fire resistance levels. The calcium sulphate core panels are finished with antistatic laminate or PVC on top, while the bottom is clad with 0.5mm G. I. sheet & sides are covered with conductive black PVC stripes. The self-load of this system is high compared to wood & steel floors.

*Ideal for – Oil refineries, Gas stations & Offshore platforms.*



Model No.	Size (mm)	Point Load (Kg)	Uniform Load (Kg)	Ultimate Load (Kg)	Roll Load Kg 10000-10times	Impact Load (Kg)
<b>Wood Core</b>						
HDW 600 30 HPL (FS-700)	600 x 600 x 30	> 300	> 1250	> 900	230-300	> 70
HDW 600 40 HPL (FS-1000)	600 x 600 x 40	> 450	> 2300	> 1350	360-450	> 80
HDW 600 30 B (FS-700)	600 x 600 x 30	> 300	> 1250	> 900	230-300	> 70
HDW 600 40 B (FS-1000)	600 x 600 x 40	> 450	> 2300	> 1350	360-450	> 80
HDW 800 40 HPL (FS-1000)	800 x 600 x 40	> 450	> 1500	> 1000	300-375	> 75
<b>Calcium Sulphate</b>						
CS 600 26 HPL (FS-800)	600 x 600 x 26	> 360	> 1600	> 1080	270-360	> 70
CS 600 30 HPL (FS-1000)	600 x 600 x 30	> 450	> 2300	> 1350	360-450	> 80

## Accessories

**Understructure :** This consists of pedestals, stringers & screws made out of zinc-coated steel / hot dipped galvanised. Available in different heights & thickness as specified. Aluminum die cast head pedestal are also available for low lock system.

**Ventilation Panel :** or Airflow panels are an all steel construction, available in size 600mm x 600mm x 50mm. Top surface of these panels are finished with antistatic laminate & beading. Each panel has 22mm dia. holes laid out to provide 42% open area for air circulation. A special metallic damper is attached on the underside of the tile for controlling the airflow (adjustable by a key from the top without opening the panel). These panels are recommended for server rooms, where under -floor precision air-conditioning units are installed.

**Panel Lifter :** A small handy tool for removing & re-placing the tiles during maintenance operations.

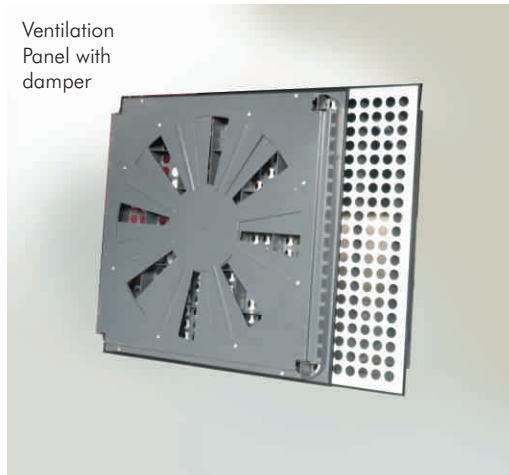
**POP-UP (Electrical Switch) Box :** A concealed box with a flip top, for electrical sockets placed as a service point in a server room / near racks, etc.

**Grommets :** These are made out of high grade PVC or fiber, and are available in round and rectangular shapes. Used as boundary edging for cutouts, thus preventing cuts / damage to various wires being pulled at the time of installation & maintenance. Besides controlling the air leakage, Grommet adds to the finished look of the tile.

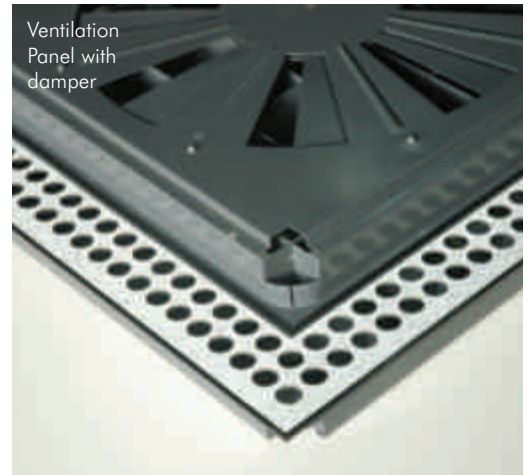
Understructure



Ventilation Panel with damper



Ventilation Panel with damper



Grommet & Pop-up Box



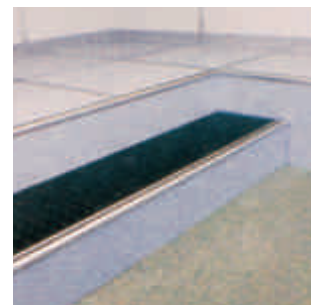
Panel Lifter



Framework



Ramp



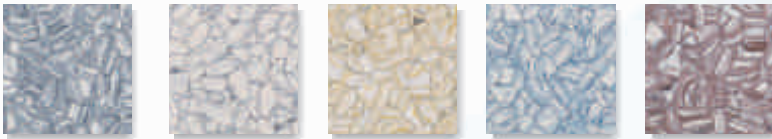
Step

# Surface Finish Options

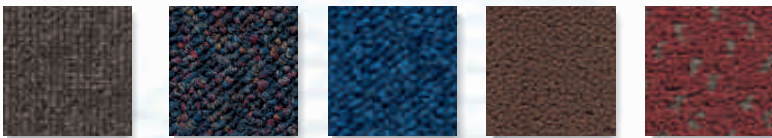
## Anti-Static Laminates



## Conductive PVC



## Anti-Static Carpet



## Underfloor Services



[www.innersp.com](http://www.innersp.com)



For further details please contact :

Authorised Dealer



H-58, Sumer Nagar II,  
S. V. Road, Borivali (West),  
Mumbai 400 092.

Tel : +91-22-2805 2157/58

Fax : +91-22-2805 0649

Email : [info@innersp.com](mailto:info@innersp.com)

Email : [inspc@mtnl.net.in](mailto:inspc@mtnl.net.in)

502, Purva Plaza Building,  
Shimpoli Road, Borivali (West),  
Mumbai 400 092.

Tel : +91-22-2899 8612/13

Fax : +91-22-2899 5869

Email : [inspc@innersp.com](mailto:inspc@innersp.com)

