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# FLOORS THAT SUPPORT TODAY'S BUSINESS ENVIRONMENT



THE CURRENT RANGE OF DURAFLOR ACCESS FLOORS PRODUCTS HAVE BEEN SPECIALLY DESIGNED TO CATER FOR THE DEMANDS AND FLEXIBILITY REQUIRED BY TODAY'S HIGHLY TECHNOLOGICAL BUSINESS ENVIRONMENT.

### INTRODUCTION



#### HART presents the Duraflor System for Raised Access Flooring

For General Offices or Data Center, for Clean Rooms or for specialist applications, Duraflor access floors ensure that convenience is built-in for every building:

- Conceal literally miles of cabling, yet allowing easy and fast access for maintenance or redesign.
- Guaranteed outstanding rigidity even under extreme loads.
- Ensure cost savings from the time of construction to the time of occupation and beyond.

#### There's more to Duraflor than meets the eye

The widest range of access floors in this region and the rigorous standard they meet the visible signs of Duraflor leading position in interiors industrial.

By asking for Duraflor systems, you will get much more than what the name promises.

#### A range to meet all your needs

Whatever your application, Duraflor has a solution. Innovative solutions like the advanced systems means Duraflor has the access floor that will meet local performance standards. From offices to manufacturing facilities, you will find the perfect solution to your flooring needs.

#### Assets protection for a safe future

Hart is one of the longest and most established leaders in providing top quality access floor system and services.

Established in 1971, Hart has grown from a simple fire protection company to the diversified conglomerate today.

With our extensive experience and proven expertise, we act firmly as your business partner in assets protection for a safe future.

#### Quality assurance

At Hart, we do not make empty promises. Our raised floor supplier is certified by ISO 9001: 2000. We ensure stringent manufacturing inspection procedures and all our finished products are tested for full quality assurance.

#### Research & Development

Innovative solutions such as the Solid-flo 45% and 55% High Volume Air Flow panel & D'Brush cable grommet are the results of extensive investment in R & D.

Our dedicated research facilities are custom designed for investigative, developmental and evaluative research to keep us at the leading edge of the interiors industry.

From small projects to major international developments, Hart provides the solution you need, whenever and wherever you need it.



Tuas Factory

## **GENERAL OFFICE**

Access floor panels for general office come with complete accessibility to underfloor space without sacrificing performance level. Panels are bare for carpet tile application or are presented in other final finishes selected by interior designer.



Specification for Raised Floor Panel

Panel		RSF 800	RSF 1000	RSF 1250	RSF 1500	RSF 2000
Concentrated Load	Kn	3.6	4.5	5.6	6.7	8.8
Uniform Distributed Load	Kn/m²	13	17	22	22	22
Ultimate Load (3 Times of Con Load)	Kn	10.8	13.5	16.8	20	25
Rolling Load	Kn	2.7	3.6	4.5	5	5.5
Impact Load	Kg	46	55	66	80	80

This specification table will share between Page 3 and Page 4.

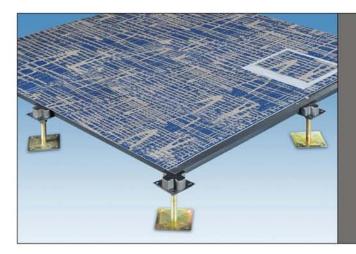
# DATA CENTER

Duraflor access floor system provide the required stability for data centers, incorporating high degrees of accessibility and flexibity, expediting system upgrades when necessary.



### **UNDERSTRUCTURE**

These understructure are designed for use at both general office and data center. They ensure rigidity, lateral stability, quiet performance as well as a solid and secured underfoot feel.



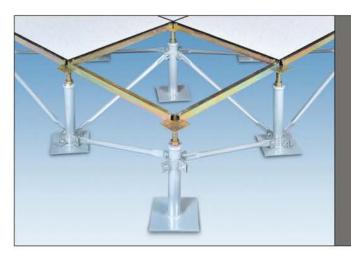
#### Panel Lock System

The Panel Lock System is suitable for general office application . Each panel is mechanically fastened to the pedestal head at all four corners, ensuring rigidity and lateral stability. Access is achieved by releasing the fasteners and lifting the panel. Each pedestal head has locking nuts to ensure that the pedestal height is maintained.



#### Rigid Grid System

The Rigid Grid System is suitable for General Office, Data Center and Server Room applications. They provide high stability by utilizing stringers which hold the floor and pedestal head in position when panels are removed. Stringers are mechanically secured onto



#### Rigid Grid with Bracing System

The Rigid Grid with Bracing System is suitable for the above mentioned usages that required maximal stability, as well as for extreme high finish floor height application.

### **DURAFLOR SYSTEM FINISHES**

8138

8194

Although Duraflor panels can be covered with loose lay carpet tiles, Duraflor system includes a wide range of factory applied finishes and an even wider range of colour option. From hardwearing High Pressure Laminates (HPL) to homogeneous press vinyl tile finishes, Duraflor has the tailor-made solution for any application.

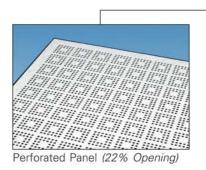
#### HPL Finishes - 1.2mm, 1.5mm



#### Conductive Vinyl Finishes - 2mm / 3mm



## **ACCESSORIES**



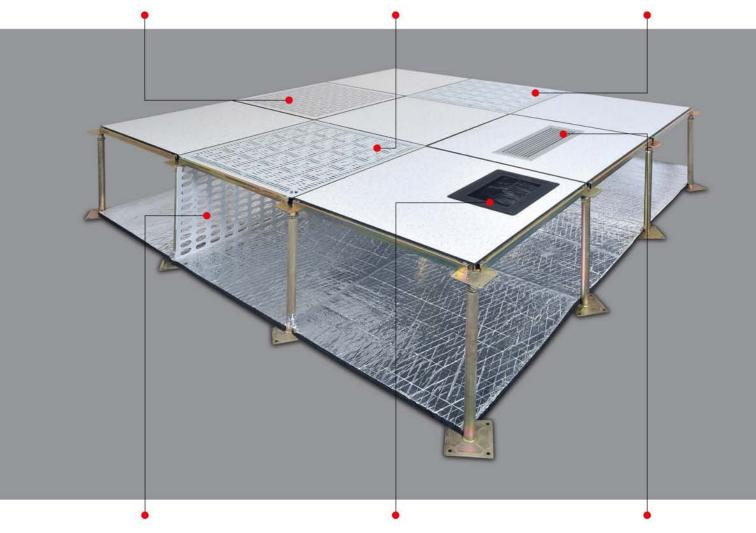
Solid-Flo High Volume Air Panel

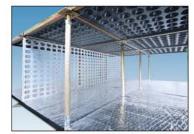


Solid-Flo 45 (45% Opening)



Solid-Flo 55 (55% Opening)





Plenum Air Balancer (Designed and make to requirement)



D'Brush Cable Grommets Size: 284mm (L) x 214mm (W) Size: 214mm (L) x 214mm (W) Custom size on request



Floor Grille



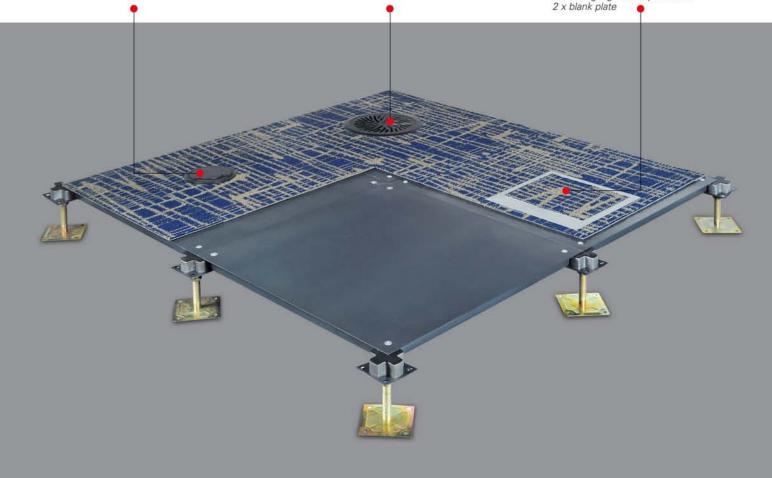
Grommet (140mm Diameter)

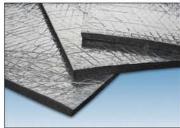


Air Diffuser (200mm Diameter)



3 Compartment Service Outlet Box Size: 278mm (L) x 278mm (W) 1 x twin gangs 13 amps socket 2 x blank plate





Close Cell Thermal Insulation (25mm to 50mm thick Close Cell Thermal Insulation with factory laminated high quality aluminium foil)



Double Cup Panel Lifter



Opposed, Sliding & Circular Damper

# ALUMINIUM ACCESS FLOOR SYSTEM

The Duraflor Aluminium access floor system for clean rooms is appropriate for controlled processing environments such as integrated chip manufacturing, biomedical testing, pharmaceutical manufacturing and chemical processing.



SOLID PANEL		ASP 1000	ASP 1200
Concentrated Load	Kgf/6.45cm²	1000	1200
Uniform Distributed Load	Kgf/m²	2000	2200
Ultimate Load	kgf/6.45cm² at center	2000	2500



PERFORATED PANEL		APF 1000	APF 1200
Concentrated Load	Kgf/6.45cm²	800	1000
Uniform Distributed Load	Kgf/m²	1350	1450
Ultimate Load	kgf/6.45cm² at center	1800	2200



GRATED PANEL		AGT 1000	AGT 1200
Concentrated Load	Kgf/6.45cm²	800	1000
Uniform Distributed Load	Kgf/m²	1350	1450
Ultimate Load	kgf/6.45cm² at center	1800	2200

### PROJECTS DONE BY HART SINCE 1981

 DEVELOPMENT BANK OF SINGAPORE, CHANGI BUSINESS PARK
 DEVELOPMENT BANK OF SINGAPORE, THE COMTECH DEVELOPMENT BANK OF SINGAPORE, SHENTON WAY TOWER
 STANDARD CHARTERED BANK, CHANGI BUSINESS PARK TAMPINES GRANDE, TAMPINES CENTRAL
 TOWER FIFTEEN, HOE CHIANG ROAD
 CHINA SQ FOOD CENTER, TELOK AYER STREET DSTA BUILDING, SCIENCE PARK III
 SINGAPORE CIVIL DEFENCE, YISHUN INDUSTRIAL PARK
 SINGAPORE CIVIL DEFENCE, JALAN BAHAR . SINGAPORE CIVIL DEFENCE, UBI AVE . VERITAS HUB, SERANGOON NORTH . AMERICAN EXPRESS, THE COMTECH CREDIT SUISSE SINGAPORE, HANSAPOINT
 CREDIT SUISSE SINGAPORE, SERANGOON NORTH AVENUE 5
 EQUINIX, PIONEER DRIVE . SINGTEL TELEPARK, TAMPINES CENTRAL . SINGTEL COMCENTRE III, EXETER ROAD . SINGTEL KIM CHUAN TELECOMMUNICATION COMPLEX, KIM CHUAN ROAD . INLAND REVENUE HOUSE, THOMSON ROAD . CITIBANK N.A, MILLENIA TOWER . PSA, VISTA PASIR PANJANG . CRIMTSON LOGIC, SCIENCE PARK II . OVERSEA UNION BANK, TAMPINES CENTRAL • PRUDENTIAL TOWER, CHINA STREET • CAPITAL SQUARE, CHINA STREET • WISMA ATRIA, ORCHARD • CHANGI AIRPORT POLICE STATION . SINGAPORE INSTITUE OF MANAGEMENT, CLEMENTI ROAD 3 . PREMAS INTERNATIONAL LTD, CHAI CHEE TECHNOPARK . MINISTRY OF INFORAMATION AND ART, HILL STREET . ST ASSEMBLY (STATS), YISHUN AVENUE . SINGAPORE EXCHANGE, UNITY CENTER AT SHENTON WAY . NANYANG TECHNOLOGICAL UNIVERSITY, TECHNO PLAZA . UNITED TEST AND

ASSEMBLY CENTER, SERANGOON NORTH AVENUE 5 . UBS, SUNTEC CITY TOWER 5 . ABN AMRO, HAW PAR TECHNO CENTER



Tampines Grande, Tampines Central





Standard Chartered Bank, Changi Business Park



DBS, Changi Business Park



Tower 15, Hoe Chiang Road



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