

# references

**Intercell has been used by many well-known end-users all over the world. These customers have successfully organised and structured their cable systems by using Intercell. They are all delighted by the flexibility, practicality, ease of installation and use, great compatability and connectivity as well as good economic sense using Intercell.**

Inland Revenue	England
London School Economics	England
Standard Life	Scotland
Jones Lang LaSalle	Scotland
LVMH	France
Centre hospitalier	France
Carlson Wagonlit	France
Compaq	The Netherlands
Unisys	The Netherlands
Shell	The Netherlands
Nike	The Netherlands
BMW	Germany
Michelin	Germany
O' Connell Bridge House	Ireland
Pension Services	Ireland
Smithfield	Ireland
Aer Rianta	Ireland
Museo de la Ciencia	Spain
Fagor Industrial	Spain
Villa Immobiliare '89	Italy
Credit Lyonnais	Italy
Avantor/ Regus	Norway
Statoil	Norway
NOVI 5	Denmark
Motorola	Denmark
ABB	Sweden
Infracity	Sweden
Sun Microsystems	Switzerland
Grand Casino	Switzerland
AIG Lincoln	Hungary
AIG Lincoln	Poland
Citi Bank	Romania
Makro	Czech Republic
Yokos	Russia
Nova KBM	Slovenia
Sanlam	South Africa
African Harvest	South Africa
Vodafone/Click	Egypt
Morgan Stanley	Israel

# Intercell

## cable management flooring system

The Intercell cable management flooring system equips todays offices for tomorrows needs. This brochure will tell you how to create a flexible, userfriendly and cost efficient workspace.

10/2002

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# what's next?

**Intercell allows for easy and quick workspace changes within the four walls of your office.**

**The patented multi-pedestal system has been successfully used by many customers throughout Europe. They have all experienced the flexibility, ease of use, connectivity and economic sense of Intercell.**

Intercell is available in four total system heights:

- 40 mm
- 60 mm
- 90 mm
- 110 mm

The low height and weight of the system make the system extremely suitable for both new build and refurbishment buildings.

The integrated cabling structure under an Intercell floor is easy to access and changes to the cabling network can be made fast.

Organisational changes therefor do not turn into a major office dilemma.

# features and benefits

**Intercell - the low profile Cable Management**

**Flooring System from Interface offers a strong, space saving cellular flooring system, designed to manage cable distribution in existing and new structures.**

**The Intercell floor offers a complete package of practical and long-term benefits:**

**Easy handling and installation.** With its practical modular size of 500 x 500 mm., Intercell offers easy handling, transport, storage and of course installation.

**Building site efficiency.** The practical installation of Intercell offers site-efficiency, small areas can be handed over quicker resulting in a shorter programme and less disruption.

**Cable installation.** Installation of cabling is much easier and faster compared with ceiling, wall and cableducting systems. A special Intercell floorbox offers full compatibility to most standard European connector types.

**Cable capacity.** Despite the low height of the system, Intercell offers maximum cabling-capacity. The multi-pedestal structure creates a basis for natural cable distribution and separation.

**Low height.** With its low profile, Intercell offers minimal floor-to-ceiling encroachment and can be installed in existing or new buildings with little or no loss of headroom, saving substantial construction costs.

**High performance.** With 16 pedestals per panel and 64 pedestals per m<sup>2</sup> Intercell creates a solid and safe underfoot feel. The load carrying capacity is outstanding.

**Low weight.** The additional weight to the building structure is 22 kg/m<sup>2</sup> at a maximum.

**Static dissipation.** Intercell does not adversely affect the modular carpet static propensity and static dissipation properties.

**No settlement adjustments.** Once installed, Intercell will not require any settlement adjustments or derocking, which saves operational costs and minimises workspace disruption.

**Future planning advantages.** Intercell has enough cable capacity to suit any future needs and is easy to reconfigure when organisations need to change, resulting in lower operational costs of the building.



Intercell

cable management flooring system



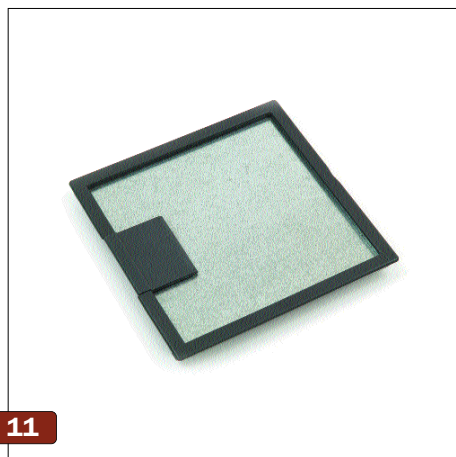
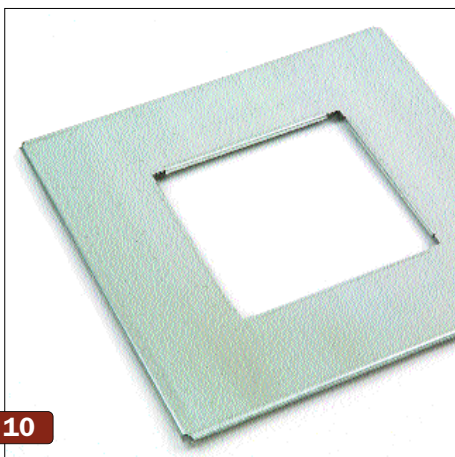
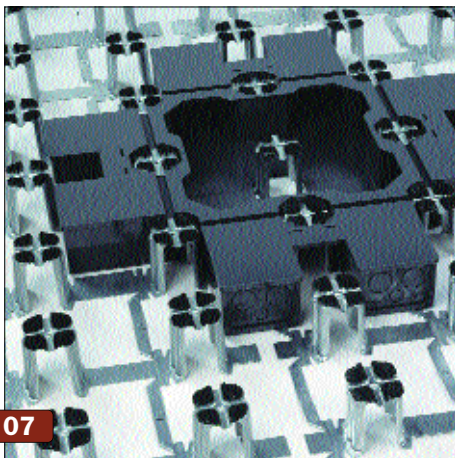
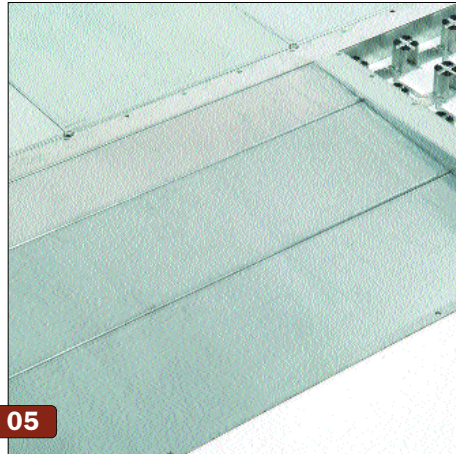
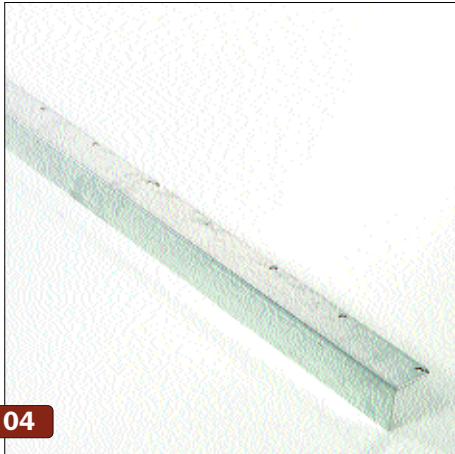
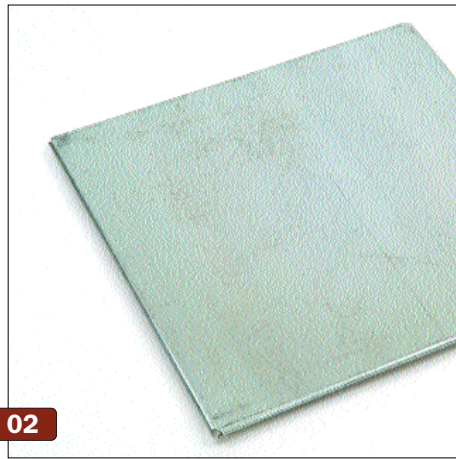
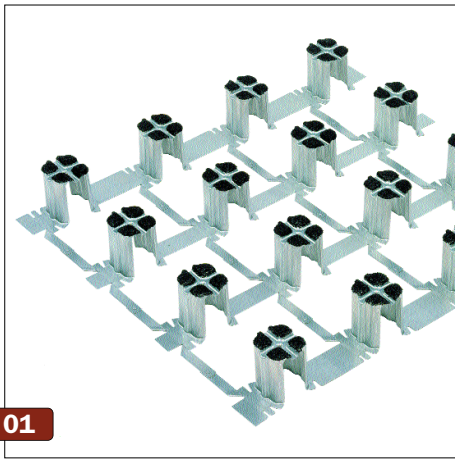
# Intercell office for life

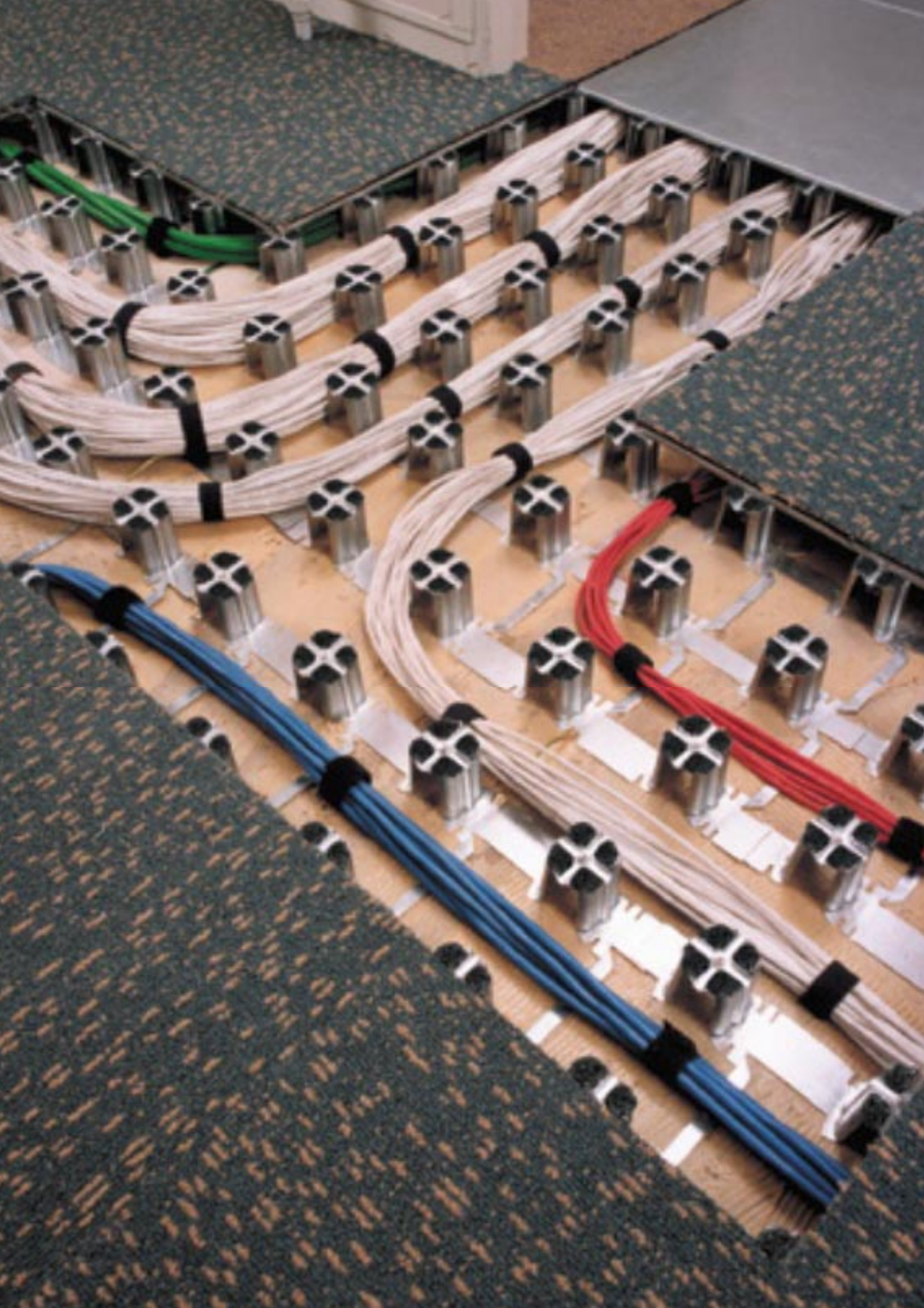
Intercell is a trademark of Interface, the world's biggest manufacturer of modular flooring solutions. Interface believes in sustainable solutions changing costs into investments. The Intercell cable management system avoids unnecessary costs, since Intercell was designed by people who listened carefully to users of buildings and their constantly changing needs. Key requirement here was the ease of workspace change, which was easily met by Intercell with its full flexibility. Flexibility in use. Flexibility in application. Flexibility in design.

**With Intercell we are ready for your future!**

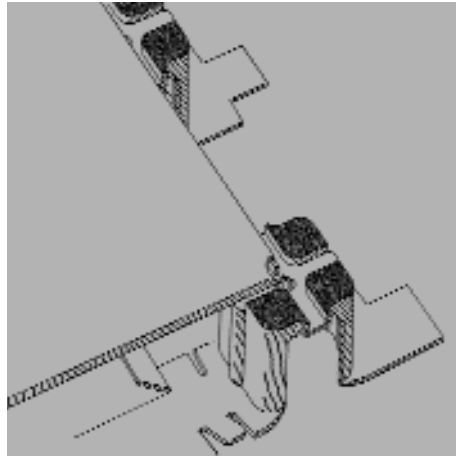
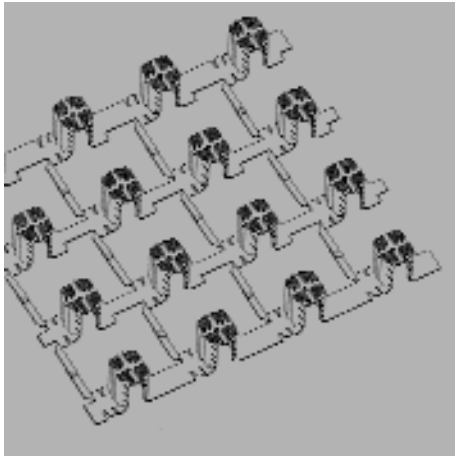
# overview Intercell components

- 01 Pedestal panel (50 x 50 cm)**
- 02 Steel plate (50 x 50 cm)**
- 03 Megascrew**
- 04 Edge rail**
- 05 Ramp**
- 06 Acoustical firebarrier**
- 07 European junctionbox**
- 08 Floorbox for UK**
- 09 Floorbox for Germany, Switzerland and Austria**
- 10 Access plate (50 x 50 cm)**
- 11 Cover for access plate (25 x 25 cm)**
- 12 Earthing cable (for relevant countries)**





# pedestal panels

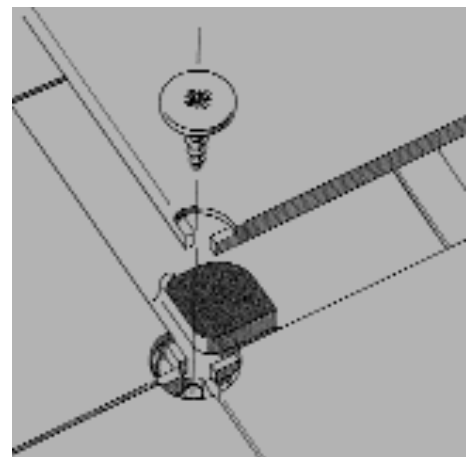
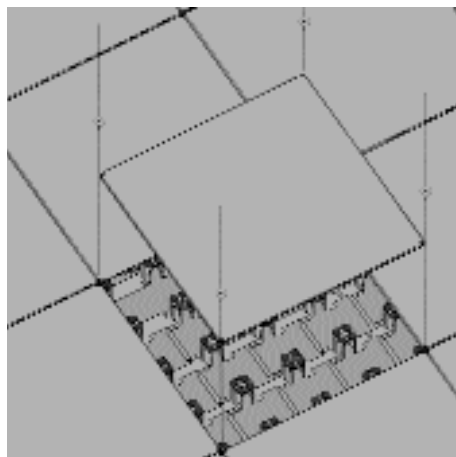
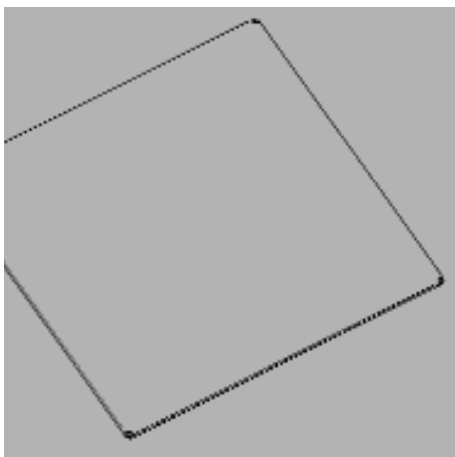


The modular pedestal panels of the Intercell system are made of galvanised steel with a heart to heart distance between the pedestals of 125 mm. The pedestals with heights of 38, 58, 88 or 108 mm have a locating channel on the top of each pedestal to align and secure the top plates. To reduce impact sounds, a recycled rubber has been applied to the top of the pedestals. The pedestals, forming a natural cable way, are bonded to the subfloor using a special Intercell adhesive that allows an easy and clean installation without any drilling.

## TECHNICAL DETAILS

Pedestal panel	Height 58 mm	Height 88 mm	Height 38 mm	Height 108 mm
Style code	71167	71267	71367 (optional)	71467 (optional)
Material	galvanised steel	galvanised steel	galvanised steel	galvanised steel
Sounddeadening material	recycled rubber	recycled rubber	recycled rubber	recycled rubber
Colour	grey	grey	grey	grey
Supp. pedestals per/m <sup>2</sup>	64	64	64	64
Weight kgs/m <sup>2</sup>	4,0 kg	5,2 kg	3,2 k	6,0 kg
Dimensions	495 x 425 mm	495 x 425 mm	495 x 425 mm	495 x 425 mm
Pedestal units per box	20 (5 m <sup>2</sup> )	20 (5 m <sup>2</sup> )	28 (7 m <sup>2</sup> )	16 (4 m <sup>2</sup> )
Panels per m <sup>2</sup>	4	4	4	4

# steel plates

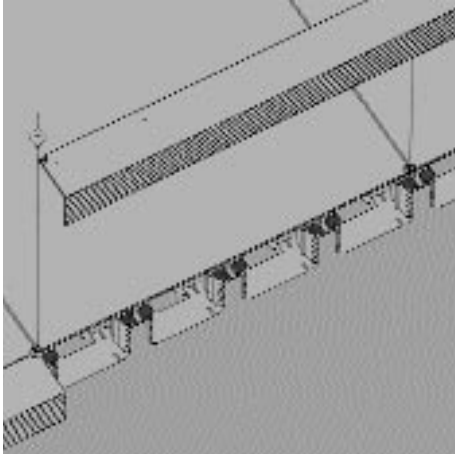


The top plates of the Intercell system have a dimension of 500 x 500 mm and are made of hot dipped galvanised steel. The edges of the plates are folded at 90° holding the plates in position when installed on top of the pedestal modules. Each corner of the steelplate has holding edges for fixing the screw. The specially designed screw has a washer that overlaps the holding edges of the steelplate corner.

## TECHNICAL DETAILS

	Steelplate	Megascrew (screw/washer incorp.)
Stylecode	71073	71013
Material	galvanised steel	galvanised steel
Weight kg/m <sup>2</sup>	16	
Dimensions	500 x 500 mm	4,8 x 19 mm x 15,5 mm (washer)
Plates per box	80 pieces (20 m <sup>2</sup> )	
Plates per m <sup>2</sup>	4	
Screws per box		200 pcs.

# edge rails

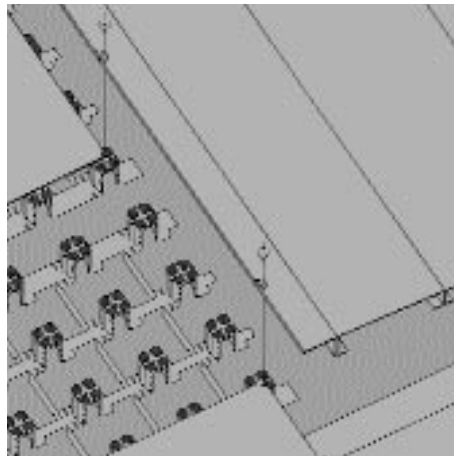
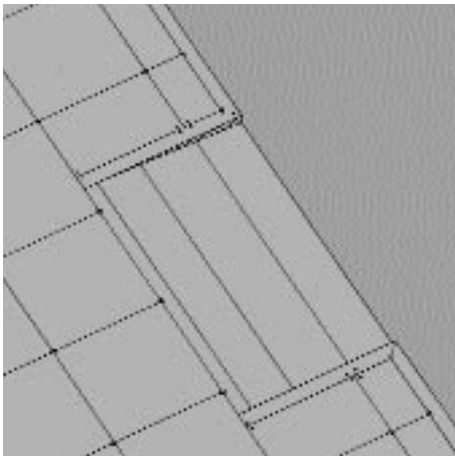


The edge rail is designed to lock into the pedestal keyway and provides a finished edge where the flooring system does not end at a wall or partition.

## TECHNICAL DETAILS

Edge rails	60 mm system	90 mm system	40 mm system	110 mm system
Stylecode	71117	71217	71317	71417
Material	galvanised steel	galvanised steel	galvanised steel	galvanised steel
Weight	3,8 kg	4,8 kg	3,2 kg	5,4 kg
Length dimensions	2000 mm	2000 mm	2000 mm	2000 mm
Width dimensions	65 mm	65 mm	65 mm	65 mm
Height dimensions	60 mm	90 mm	40 mm	110 mm

# ramps

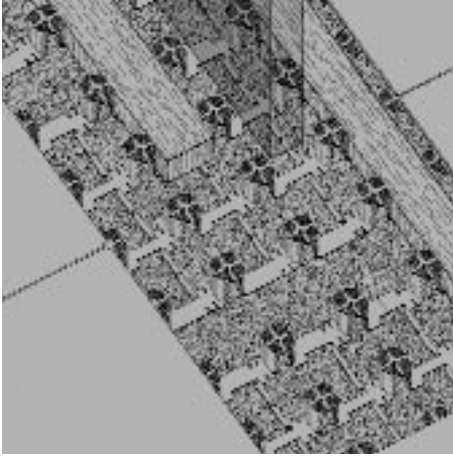


The sectional steel ramp is used to descend the Intercell system. The standard gradient is 5°. The ramp comes in 2, 3, 4 or 5 parts depending on the height of the system. To install a ramp into an Intercell floor, additional edge rails are needed around the ramp.

## TECHNICAL DETAILS

Ramps	60 mm system	90 mm system	40 mm system	110 mm system
Stylecode	71142	71242	71342	71343
Material	galvanised steel	galvanised steel	galvanised steel	galvanised steel
Colour	grey	grey	grey	grey
Weight	20,1 kg	31,5 kg	12,5 kg	41,1 kg
Length dimensions	670 mm	1020 mm	440 mm	1247 mm
Width dimensions	1000 mm	1000 mm	1000 mm	1000 mm
Nr. of parts	3	4	2	5
Gradient	5°	5°	5°	5°

# acoustical barriers

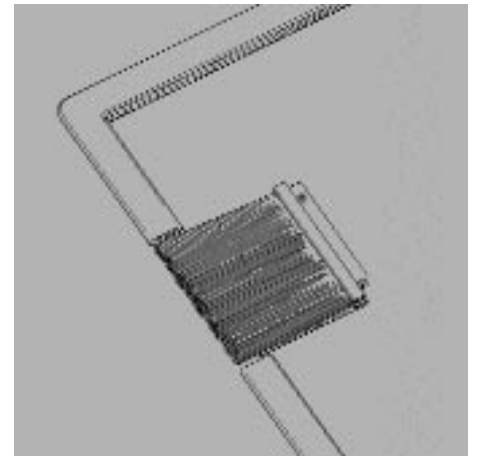
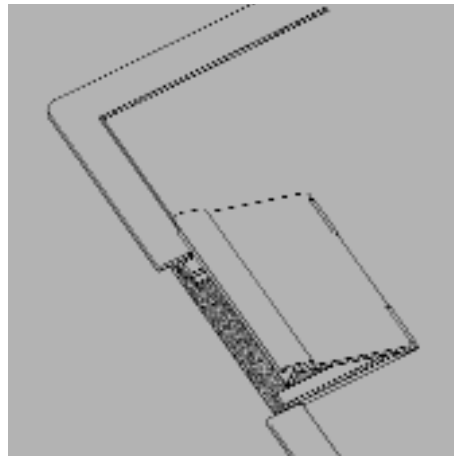
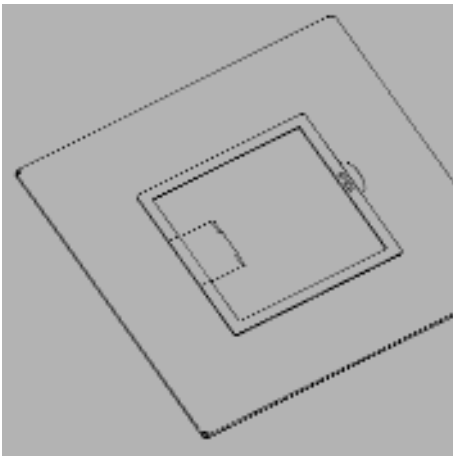


The acoustical firebarriers are made of high density, non-flammable stonewool and wrapped in polyethylene foil. They fit exactly in between two pedestal rows of the pedestal module. The barrier is used to reduce sound travel under the floor, especially in installations where separation walls are placed over the flooring system. The barrier is also used as a firebreak.

## TECHNICAL DETAILS

Acoustic barriers	60 mm system	90 mm system	40 mm system	110 mm system
Stylecode	71632	71633	71653	71658
Material	stone wool	stone wool	stone wool	stone wool
Weight	850 gr	1300 gr	560 gr	1550 gr
Height dimensions	57 mm	87 mm	37 mm	107 mm
Length dimensions	1200 mm	1200 mm	1200 mm	1200 mm
Width dimensions	80 mm	80 mm	80 mm	80 mm

# access plates

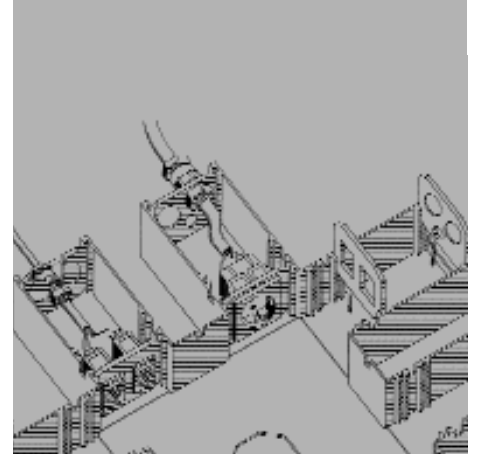
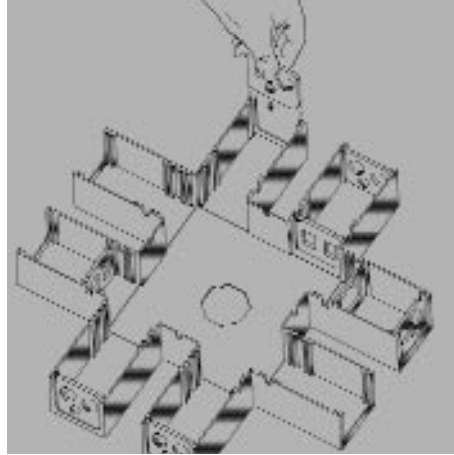
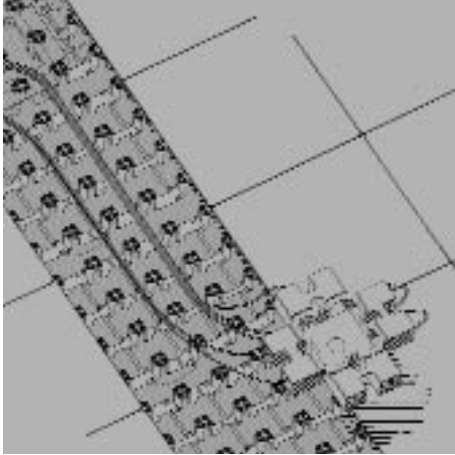


To provide access to the Intercell floorbox, a range of access plates is available. These galvanised steel panels consist of an access panel of 500 x 500 mm and a range of separate covers.

## TECHNICAL DETAILS

Access plates	access plate with central hole	access plate with eccentric hole	cover with poly-carbonate protector	cover with brushprotector
Stylecode	71604	71666	71606	71655
Panel	galvanised steel	galvanised steel	galvanised steel	galvanised steel
Cableprotector			grey polycarbonate	black brush
Rim			grey polycarbonate	grey polycarbonate
Weight kg/pc	3,1	3	1,1	1,1
Dimensions	500 x 500 mm	500 x 500 mm	250 x 250 mm	250 x 250 mm
Opening for cables			58 mm	58 mm

# junction box



The Intercell junctionbox is made of polycarbonate and offers full flexibility. The box consists of a bottom and top and has 8 compartments that are closed on the outside by removable grommet inserts. This allows for easy and quick preparation of cabling. Connectors can be mounted in specially designed removable insert plates that can slide into the 2 different positions of each compartment. The bottom of the Intercell junction box is provided with a hole that fits over an individual pedestal support of the Intercell structure. Please ask for the Intercell Connectivity guide, to see the excellent connector compatibility of Intercell.

## TECHNICAL DETAILS

### Junctionbox

- \* stylecode 71700 incl. 8 cable grommet insertplates
- \* stylecode 71705 (multipackage with 10 pieces of 71700)

Composition	polycarbonate
Colour	darkgrey (RAL 7035)
Weight	740 gr/pc.
Dimensions:	
- inner measurements (total)	195 x 195 mm
- outer measurements	455 x 455 mm
- inner measurements of the compartments	125 x 68 x 53 mm
<b>Push through insertplates for grommets</b>	
Composition	polycarbonate
Colour	darkgrey (RAL 7035)
Grommet dimensions	2xPG16 (21 mm), 1xPG7 (14 mm)

# that easy

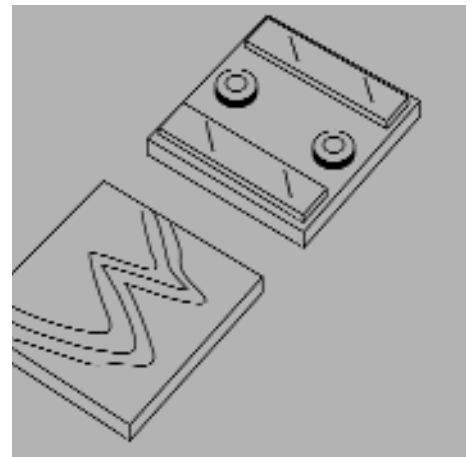
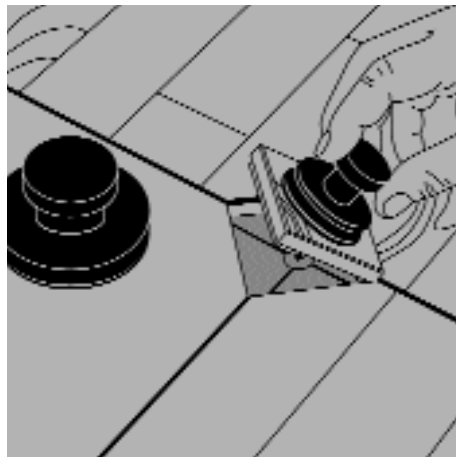
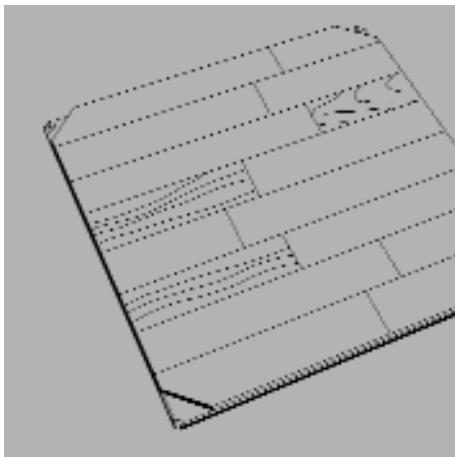
**A good subfloor. Dry, level and clean. That's all to install the Intercell cable management flooring system using professional tools and fitters.**





# Intercell woodfloor

Modern technology under a classical floorcovering. The Intercell woodfloor combines the advantages of a flexible cable management flooring system with the ambiance of warm and beautiful woodspecies like oak, ash and merbau. Just as easy to install and to use as the same floor using modular floorcovering from Interface.



The Intercell woodfloor product combines 2 in 1: the Intercell cable management system and a high quality parquet woodfloor, all installed in one go!

This product consists of a 14 mm woodfloor and a 3,6 mm thick surface layer in oak, ash or merbau glued to the top of an Intercell steelplate. The corners are cut off diagonally leaving space for the megascrew to be used. The remaining open square (67 x 67mm) when 4 plates have been installed can be covered with a so called corner lock that has 2 magnets at the back to attach them to the steel and keep them safely positioned.

#### TECHNICAL DETAILS

Intercell woodfloor	Oak	Ash	Merbau
Style code	71101	71103	71105
Material	galv. steel + oak	galv. steel + ash	galv. steel + merbau
Total thickness	14 mm	14 mm	14 mm
Total weight (incl. corner locks)	24 kg/m <sup>2</sup>	24 kg/m <sup>2</sup>	24 kg/m <sup>2</sup>
Total wearlayer	3,6 mm	3,6 mm	3,6 mm
Taber test	7000 turns	7000 turns	7000 turns
Brinell hardness	3,7	4	5,5
Dimensions	500 x 500 mm	500 x 500 mm	500 x 500 mm
Dimensional stability	+0,02% / -0,04%	+0,02% / -0,04%	+0,02% / -0,04%
Panels per m <sup>2</sup>	4	4	4

#### TECHNICAL DETAILS

Intercell cornerlocks	Oak	Ash	Merbau
Style code	71102	71104	71106
Material	oak squares with 2 magnets	ash squares with 2 magnets	merbau squares with 2 magnets
Total thickness	14 mm	14 mm	14 mm
Total wearlayer	3,6 mm	3,6 mm	3,6 mm
Taber test	7000 turns	7000 turns	7000 turns
Brinell hardness	3,7	4	5,5
Dimensions	67 x 67 mm	67 x 67 mm	67 x 67 mm
Squares per m <sup>2</sup>	4	4	4

# testresults

Subject	Description	Testresults
Pointload 25 x 25 mm.	This test simulates the effect of a pointload.	Maximum deflection: * at 3000 N < 2,4 mm Maximum permanent indentation: * at 3000 N < 0,8 mm
Maximum working load.	This test simulates the maximum workingload on a point loading of 25 x 25 mm.	Maximum working load = 10 kN.
Uniformly distributed load.	This test simulates an uniform load for a period of 24 hours.	Deflection at 16000 N/m <sup>2</sup> : < 0,5 mm. Deflection at 48000 N/m <sup>2</sup> : < 0,5 mm.
Soft Body Impact test.	A 40 kg soft body is dropped onto the system from a height of 1 mtr.	The system did not collapse.
Hard Body Impact test.	A 4,5 kg hard body is dropped onto the system from a height of 60 cm.	The system did not collapse.
Surface spread of flame.	This test uses the radiant panel according to BS 476.	Class 1: 0,00 mm spread of flame.
Small Scale Fire test.	A fire is created in the void with 1 kg of wood which is allowed to burn for 30 minutes. The whole system is loaded with 800 kg/m <sup>2</sup> .	Maximum deflection: 0,98 mm.
Fire test for building products acc DIN 4102.	Determination of inflammability and contribution to the extension of the fire.	Class B1.
EMC test: Electro Magnetic Compatibility.	Protection of the system regarding electromagnetism.	Attenuation: * from 3 - 30 Mhz: approx. 25 dB * from 30 - 1000 Mhz: approx. 20 dB
Vertical impact sound isolation: ISO 717/2.	The impact sound isolation is measured from a room above to a room downstairs.	Delta Lw: * without carpet: 23 dB * with carpet: 30 dB
Horizontal impact sound isolation: ISO 717/2.	The impact sound isolation is measured from one room to a room annex using 2 rockwool barriers.	L n, f, w = 46 dB.
Vertical airborne sound isolation: ISO 717/1.	The airborne sound isolation is measured from one room to a room downstairs.	Delta Rw: * without carpet: 52 dB * with carpet: 57 dB
Horizontal airborne sound isolation: ISO 717/1.	The airborne sound isolation is measured from one room to a room annex using two rows of rockwool.	D n, f, w = 53 dB.
Thermal isolation value: ISO 10211-1.	The thermal dissipation is measured in m <sup>2</sup> K/W.	Rc-value (58mm system): * without carpet: 0,083 m <sup>2</sup> K/W * with carpet: 0,153 m <sup>2</sup> K/W

**Warranty:** Interface Europe warrants the Intercell product to perform to the specifications published here above and in the full performance document in accordance with the terms stated in the warranty document available from your local Interface office. Copies of specific testreports are available on request.



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# Intercell

cable management flooring system

## Intercell cable management flooring

Intercell is a low profile cable management flooring system that offers a strong, flexible, space saving solution to managing cable distribution in existing and new structures.

### Introduction and applications

Intercell has been developed specifically as a highly flexible cable management system for modern working environments. It can be easily installed in existing or new structures and provides a strong, flexible floor.

### Authority :

All Interface products are tested to the most stringent health and safety standards and the company has BS EN ISO 9001: 2000 and BS EN ISO 14001 accreditation.

### Description :

Intercell is designed with a linear, grid structure that provides efficient cable routing and a practical separation of various cabling types e.g. data, telecommunications and power. Its flexible design enables future changes and IT innovations to be included. It comprises a number of elements, described below, from which are selected items for specific projects.

### Composition, manufacture :

Panel support is provided by galvanised steel units which have integral fixed pedestals in a square grid pattern at 125 mm centres.

There are 16 pedestals per panel or 64 per m<sup>2</sup>. The top of each pedestal has locating channels to align and secure the covering plates. A crumb rubber coating on the pedestal shoulder provides a sound-deadening barrier to the top plate. The unit is bonded to the floor with a special adhesive. The top plate is made of 2 mm thick galvanised steel with folded edges and is

mechanically fixed into the pedestal head with a Megascrew. Carpet tiles are the ideal floorcovering for Intercell thanks to the ease of accessibility provided and the fact that they can be supplied with a magnetic backing to avoid the need for adhesive. Alternatively, a bonded Tarkett™ wooden finish can be supplied with the Intercell system. Further details are available from InterfaceFLOR Sectional ramps with a standard gradient of 1 in 12 are fitted to enable ascent to or descent from an Intercell floor.

Edge rails provide a finished edge

where the floor does not end at a wall or partition.

A barrier of stonewool wrapped in polyethylene foil fits exactly on the support panel between the pedestals which both provides fire protection and acts as a sound-deadening material beneath the partitioning.

The Intercell floor box, designed and manufactured by Mita, is combined with a top plate to provide easy installation and relocation. The 3-compartment box can accommodate many combinations of switched or unswitched power sockets and flat or angled data plates for cabling, including CAT 6.

The floorbox can be pre-wired for easy installation and connection to a Mita Powertrack™ busbar for 60, 80, 90 and 110 mm systems.

A grommet can be supplied where cabling is run directly into desking.

### Dimensions (mm) :

Top plate is 500 x 500 x 2.  
Standard system depths are 40, 60, 80, 90 and 110.  
Weight Max. weight is 22 kg/m<sup>2</sup>.

### Performance :

Mechanics Testing gave the following loading results:  
pointloading - max. deflection of < 2.5mm at 300 kg, < 2.2mm at 200 kg, max..permanent indentation of top surface of < 0.5 mm at 300 kg.  
uniformly distributed load - deflection of 0.5 mm at 4800 kg/m<sup>2</sup>.  
The system did not collapse under a pointload of 1000 kg, a uniform distributed load of 4,800 kg/m<sup>2</sup> and under soft and hard body impact tests.  
Fire Surface spread of flame is Class 1 to BS 476; Intercell is of Class B1 to DIN 4102.

Sound Sound insulation:  
vertical impact sound - Delta Lw:  
without carpet - 23 DB,  
with carpet - 30 DB;  
horizontal impact sound - Ln,f,w: 46 dB, airborne sound - Dn,w: 49 dB.  
Electrical Electromagnetic compatibility test showed  
attenuations - 3 - 30 Mhz: approx. 25 dB, 30 - 1,000 Mhz: approx. 20 dB.  
Intercell does not adversely affect modular carpet static propensity and static dissipation properties.

### Economics :

Warranties The company warrants Intercell to perform to specification for a period of 10 years; full details are available from the company.

### Supply and services :

Intercell is supplied and installed through a chain of experienced dealers. Services to specifiers include provision of samples and specifications and technical advice.

### Showroom :

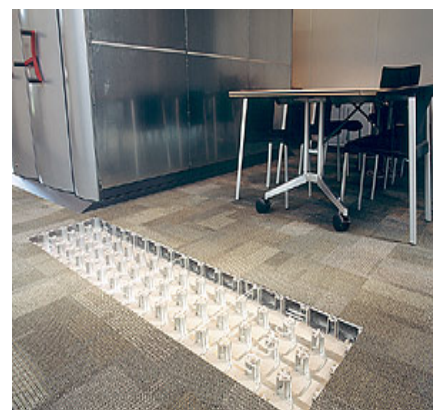
1 Northburgh Street  
Clerkenwell  
London  
EC1V 0AL  
Tel: 020 7490 3960  
Email: enquiries@InterfaceFlor.eu  
Website: www.interfaceflor.eu/intercell

### References :

Further information on the company's contract carpet tiles is available in Section (43)T Floor finishes: carpets of this edition of the RIBA Product Selector.

### InterfaceFLOR

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I N T E R F A C E

**Intercell®**

**Results loading tests**

This document will describe in short what tests are done, how they are done, what the results are and what is required.

Following characteristics are tested :

1. **point loading on 25 x 25 mm**
2. **distributed uniformly load**
3. **safety factor**
4. **soft body impact test**
5. **hard body impact test**
6. **Rolling load tests**

### **Introduction**

The tests indicated with T .... are according to the PSA documents.

PSA is the official Product Specification Access floors in the UK

Other tests not described in PSA are done according to national ( DIN, NEN, NF P ) or international tests ( ISO , EN ).

The PSA, DIN and other testing and classification procedures are the base for the preliminary European Norm prEN 12825. This **draft** European Standard is prepared by the team CEN/TC 323 and is valid for Raised Access Floors. The norm is not official yet.

The norm is based on classical floors with 60 x 60 modules resting on pedestals at the corners. As Intercell is a system with 64 studs per square meter the character of the product is quite different from the classical raised access floors and not all norms of the prEN 12825 are relevant. It is obvious that a system of heavy modules resting every 60 cm. on a pedestal requires quite different load performances. In this document we refer only to individual tests done following international tests but don't classify the Intercell system definitive.

Loads are in most cases mentioned as kN = kilo Newton.

1 kN = ca. 100 kg.

1 N = ca. 0,1 kg.

### **1. Point loading 25 x 25 mm T 8.00**

Description :

A load is applied at a square inch , 25,4 x 25,4 mm, of the steel plate installed on pedestals.

The load is placed at several positions.

Position A is the centre of the steel plate

Position B and C is the centre of the edge

Position D is 70 mm beyond the edge

Position E is the centre position between four pedestals

Position F is the centre position between two pedestals

Position G is the centre position between two pedestals on a cut edge of the steel plate.

The load stays for 23 hrs. on the steel plate and the deflection (=change in levelness) is measured. After 24 hrs it is measured again.

The difference between 23 and 24 hrs is generally minimal. So further imprint on long terms is not to expect.

The load is removed and after 2 hrs of relaxation the deflection ( bowing measured at the bottom) and the indentation ( imprint at the steel plate surface ) is measured.

## Results

The critical positions are the cut edge and centred between the pedestals.

In practice a cut edge will rarely be exposed to point loads as cutted plates are used at walls etc.

Results at 3 kN loading = ca. 300 kg.

Position	A	B	C	D	E	F	G
Deflection 23 hrs in mm	1,17	1,46	0,95	2,64	2,85	2,22	3,12
Deflection 24 hrs in mm	1,18	1,47	0,94	2,62	2,84	2,21	3,12
Deflection after 2 hrs relaxation mm	0,06	0,12	0,13	0,16	0,18	0,16	0,30
Permanent indentation in mm	0,03	0,03	0,03	0,28	0,18	0,43	0,73

Results at 2 kN loading = ca. 200 kg.

Position	E	G
Deflection 23 hrs in mm	2,16	2,88
Deflection 24 hrs in mm	2,15	2,89
Deflection after 2 hrs relaxation in mm	0,07	0,23
Permanent indentation in mm	0,00	0,23

Conclusion : The second weakest point is position E, centred between four pedestals  
A point load of 200 kg and a deflection of less then 2,2 mm is comparable with **Class 2** of the **deflection class** of prEN 12825.

Class 2 means a deflection of less then 2,5 mm after 24 hrs.

The weak position of system is position G. This is the position on the cut edge centred between two pedestals. In practice we come across this situation only close to walls and where the Intercell floor meets an original solid floor, ramps or edge rails.

When in this area point loads of 200 kg and more are expected it is advised to use some extra pedestals under the cut edge.

## 2. Uniformly distributed load T10.00

A surface of 1 square meter is exposed to an uniformly distributed load.

Using the minimum required 800 kg / mtr the test results are.

Position	A ( centre )	B ( cutted edge )
Deflection after 23 hrs in mm	0,24	0,27
Deflection after 24 hrs in mm	0,23	0,26
deflection after 2 hrs relaxation in mm	0,04	0,05

Additional information :

The maximum deflection after removing the distributed loads at position B is tested at several loads.

Results :

800 kg	0,27 mm
1600 kg	0,24 mm
3600 kg	0,33 mm
4800 kg	0,40 mm

Maximum permitted : 0,50 mm

Because of the number of pedestals per m<sup>2</sup> (64 !) very heavy furnishment with flat bottoms as safes and cupboards can be placed on Intercell.

### 3. Safety load T 11.00

To estimate the safety limit the system is loaded with the load of the individual load of the tests T 8.00 and T 10.00 ( 16 kN ) multiplied by 2,5 or 3.

The multiplying safety factor depends on the local authorities.

For France the safety factor is 2.5. For UK the factor is 3.

Result : The system does not collapse exposed to the safety load:

- at a point load of 3 times 200 kg = 600 kg
- at a uniform distributed load of 3 times 1600 kg = 4800 kg

### 4. Soft body impact test. T 12.00

This test simulates the effect of the impact by the fall of a soft body onto the intercell floor.

A 40 kg canvas bag filled with sand is dropped from a height of 1 mtr. onto the system.

The test is done at two positions.

Position 1 : at the centre of the panel.

Position 2 : at the edge of the panel.

**Result : The system did not collapse.**

### 5. Hard body impact test. T 13.00

This test simulates the effect of the impact by the fall of a hard body onto the Intercell floor.

A steel indenter weighing 4,5 kg with a 50 mm hemispherical end is dropped from a height of 60 mm onto the Intercell floor.

The test is done at four positions.

Position 1 : at the centre of the panel.

Position 2 : at the centre of one edge.

Position 3 : at the centre of an adjacent edge.

Position 4 : at a point 50 mm from a corner on a diagonal

**Result : The system did not collapse at any of the four positions.**

### 6. Rolling load ( no test norm in PSA but own test )

Please find below the rolling load test results done on our Intercell cable management system. This test simulates a loaded trolley with small soft or hard wheels that can be turned. The actual forces brought over to the floor can be quite critical, because the contact surface of wheels is smaller and the forces during rolling have a more squeezing effect. Therefore our advice of max.rolling load is mentioned below too.

- wheel diameter 250 mm : material rubber
  - load 0 kg, permanent imprint <0.05mm
  - load ca. 100 kg, permanent imprint <0.05mm
  - load ca. 200 kg, permanent imprint 0.15-0.20mm
  - load ca. 300 kg, permanent imprint 0.30-0.35mm
  - load ca. 400 kg, permanent imprint 0.45-0.50mm
- wheel diameter 200 mm: material rubber
  - load 0 kg, permanent imprint <0.05mm
  - load ca. 100kg, permanent imprint <0.05mm
  - load ca. 200kg, permanent imprint 0.15-0.20mm
  - load ca. 300kg, permanent imprint 0.40-0.45mm
  - load ca. 400kg, permanent imprint 0.65-0.70mm

- wheel diameter 82 mm: material Nylon
  - load 0 kg, permanent imprint <0.05mm
  - load ca. 100kg, permanent imprint 0.05-0.10mm
  - load ca. 200kg, permanent imprint 0.15-0.20mm
  - load ca. 300kg, permanent imprint 0.80-0.85mm
  - load ca. 400kg, permanent imprint 1.30-1.40mm (clear, visible marks)

The results have been achieved by moving the wheels and loads 3 times back and forwards on the steel plate routed between the pedestal structure.  
The speed was around 1.5m/min.

**Recommendations rolling traffic.**

Using trollys or palleters there Interface recommend a maximum allowed rolling load of 100 kg per wheel. This means a load of 400 kg on a four wheel trolley or palleter. Also **copiers** that are moved often for maintenance require attention.

To transport heavier loads please make use of protecting plates. These can be 8 mm. thick plywood plates or 2 mm thick steel plates.

Intercell



I N T E R F A C E

**MSDS**

**Galvanized Material**

**Intercell components**

# Material Safety Data Sheet

<b>Intercell</b>	Issue Date January 1, 2001	Identification Galv.
Trade Name (Common Name or Synonym) Galvanized Steel	Emergency Phone Number NA	<b>Interface</b>
Chemical Name Same	Form Flat Sheet, Formed Sheet,	

## I. INGREDIENTS

Material or Component	% Weight	Exposure Limits		
		OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )	
Base Metal	Balance	10 (Fe <sub>2</sub> O <sub>3</sub> Fume)	5.0 (Fe <sub>2</sub> O <sub>3</sub> Fume)	
Iron (Fe)				
Alloying Elements				
Carbon ©		0.005 - 0.06	None Listed	None Listed
Manganese (Mn)		0.05 - 1.50	5.0 as Manganese - Ceiling	5 as dust; 1 as fume - Ceiling
Phosphorous (P)		0.15 Max.	0.1 as Phosphorous	0.1 as Phosphorous
Sulfur (S)		.05 Max.	13 Sulfur Dioxide	5 Sulfur dioxide
Aluminum (Al)	0.10 Max.	None Listed	5.0 as welding fume	
Metallic Coating				
Zinc (Zn)	10 Max.	15.0 as insoluble compounds	5.0 as fume	
Aluminum (Al)	0.04 Max.	None Listed	5.0 as welding fume	
Antimony (Sb)	0.02 Max.	0.5 as Antimony	.05 as Antimony	
Lead (Pb)	0.02 Max.	0.05 as fume and dust	0.15 as fume and dust	

Note: The above listing is a summary of elements used in alloying steel. Various grades of steel will contain different combinations of these elements. Trace elements may also be present in minute amounts.

## II. PHYSICAL DATA

Material is (At normal Conditions): <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Gas <input type="checkbox"/> Other		Appearance and Odor Gray-Black With Metallic Lustre -- Odorless	
Acidity/Alkalinity ph=NA	Approx. Melting Point 2750 F Metallic Coat 800 F	Specific Gravity (H <sub>2</sub> O = 1) -- Approx. 7 Solubility in water (% by weight) -- NA	Vapor Pressure (mm Hg at 20 C) NA

## III. PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection NIOSH approved dust/ mist/fume respirator should be used during welding or burning if OSHA PEL or TLV is executed.	Hands, Arms and Body Used appropriate protective clothing such as welders aprons & gloves when welding or burning. Check local codes
Eyes and Face Safety glasses should always be worn when grinding or cutting; face shields should be worn when welding or burning.	Other Clothing and Equipment As Required

## IV. EMERGENCY MEDICAL PROCEDURES

Inhalation:	Remove to fresh air, if condition continues, consult physician.
Eye Contact:	Immediately flush well with running water to remove particulate; get medical attention.
Skin Contact:	If irritation develops, remove clothing and wash well with soap and water. If condition persists, seek medical attention. If significant amounts of metal are ingested, seek medical attention.

## V. HEALTH/SAFETY INFORMATION

<b>HEALTH</b>	
Steel products in the natural state do not present an inhalation, ingestion, or contact health hazard. However, operations such as welding, burning, sawing, brazing, grinding, and possibly machining, which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates may present hazards. The above operations should be performed in well ventilated areas. The major exposure hazzard is inhalation.	
Effects of overexposure:	
Acute:	Excessive inhalation of all metallic fumes and dusts may result in irritation of eyes, nose, and throat. Also, high concentrations of fumes and dusts of iron-oxide, manganese, copper, and selenium may result in metal fume fever. Typical symptoms consist of a metallic taste in the mouth, dryness and irritation of the throat, chills and fever, and usually last from 12 to 48 hours.
Chronic:	Chronic and prolonged inhalation of high concentrations of fumes or dust of the following elements may lead to the conditions listed opposite the element: <b>Iron</b> (Iron-oxide) -- Pulmonary effects, siderosis. <b>Manganese</b> -- Bronchitis, pneumonitis, lack coordination. <b>Lead</b> -- Prolonged exposure can cause behavioral changes, kidney damage, periphery neuropathy characterized by decreased hand-grip strength and adverse reproductive effects. <b>Zinc (Zinc Oxide)</b> -- See Above
Occupational Exposure Limits	
See Section 1.	

### FIRE AND EXPLOSION

Flash Point    NA    F	Auto Ignition Temperature NA    F	Flammable Limits In Air Lower    NA    % Upper    NA    %	Extinguishing Media  NA
Fire and Explosion Hazzards  None		Extinguishing Media Not To Be Used  NA	

### REACTIVITY

STABILITY <input checked="" type="checkbox"/> STABLE <input type="checkbox"/> UNSTABLE	Incompatibility (Materials to Avoid) Reacts with strong acids to form hydrogen gas.
Conditions To Avoid Non-ventilated areas when cutting, welding, burning, or brazing. Avoid generation of airborne dusts and fumes. <b>Keep Area Well Ventilated</b>	
Hazardous Decomposition Products Metallic Oxides.	

## VI. ENVIRONMENTAL

Spill or Leak Procedures <b>NA</b>	Special Precautions Use good housekeeping practices to prevent accumulation of dust and to keep airborne dust to a minium.
Waste Disposal Method Dust, etc. -- follow federal, state, and local regulations regarding disposal.	

## VII. ADDITIONAL INFORMATION

Disclaimer The information in this MSDS was obtained from sources which we believe reliable. However, the information is provided without any representation or warranty, express or implied regarding the accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.
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