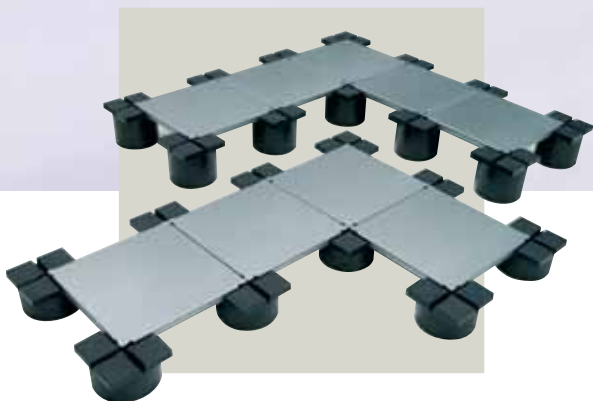


elevate your flexibility



SOLUFLEX CABLE MANAGEMENT
FLOOR SYSTEM / PRODUCT GUIDE



www.legrand.com.au

Global vision...

21st Century solutions

Why choose Legrand?

In a word, confidence. Legrand is a world leader in its field, with offices and subsidiaries in more than 60 countries and sales in close to 180 countries.

Soluflex has been specified and installed in many high-profile projects including: BMW (Munich, Germany), Mercedes (Rastatt, Germany), Nike (Brussels, Belgium), Jumeirah Emirates Towers (Dubai, EAU) and the Pacific Hotel (Hanoi, Vietnam).

Innovation for progress

With more than 1,800 people throughout the world inventing, designing, and validating, Legrand considers research and development key to success.

By actively focusing on new product development, Legrand is able to launch new ranges that contain innovative features to facilitate installation for the contractor and simplify usage for the end user.

Sustainable development

Sustainable development is at the heart of Legrand's core values. Expert teams work to ensure profitable, long-lasting and responsible growth... combining long-term performance with environmental conservation.



Soluflex... sustainable by design

Steel is the most sustainable material used in construction today and therefore one of the best ways for us to avoid problems for generations to come.

Constructed from steel tiles with recycled polypropylene supports, Soluflex requires nothing else for installation... no glue, no fixings.

The result is a system that is 100% recyclable and that can be reconfigured again and again to meet changing requirements in evolving commercial environments.



Offices



Hotels



Retail

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Systems overview	06
Integration	08
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Residential



Industrial

Using global strength and local knowledge to provide solutions to today's needs

Soluflex... **paving the way** **with integrated** **cable management**

Legrand's latest development, Soluflex, is much more than just a raised floor. This innovative new system integrates low-level flooring with Legrand's market leading cable management solutions.

All cables for power, data, and telecoms can be structured in a logical, ready to use layout that remains hidden to end users.

Quick and easy installation

You don't have to be a flooring expert to install Soluflex. It's simply a question of placing supports on the floor and then clicking the durable steel tiles into place (without the need for glue or fixings).

Once the floor has been laid, the required cabling and connections can be installed between the supports by removing the relevant tiles until cabling is complete. The finished installation can then be covered with any type of covering... carpet tiles, rubber, stone or wood. And if the office layout changes, or even relocates, Soluflex can be reconfigured and re-used.



Simple clip together assembly without the need for fixings or adhesives



Complete system with a wide range of accessories and access solutions



Easy access to power and data with built-in cavity floor boxes

Freedom of **design**

Soluflex creates well organised, multifunctional rooms where users will always have enough connection points. At the design stage, it's no longer necessary to keep track of the connection points for power and data. The cabling can be installed anywhere under the entire floor and the location of connections can be determined at any stage.

Save time. Save money

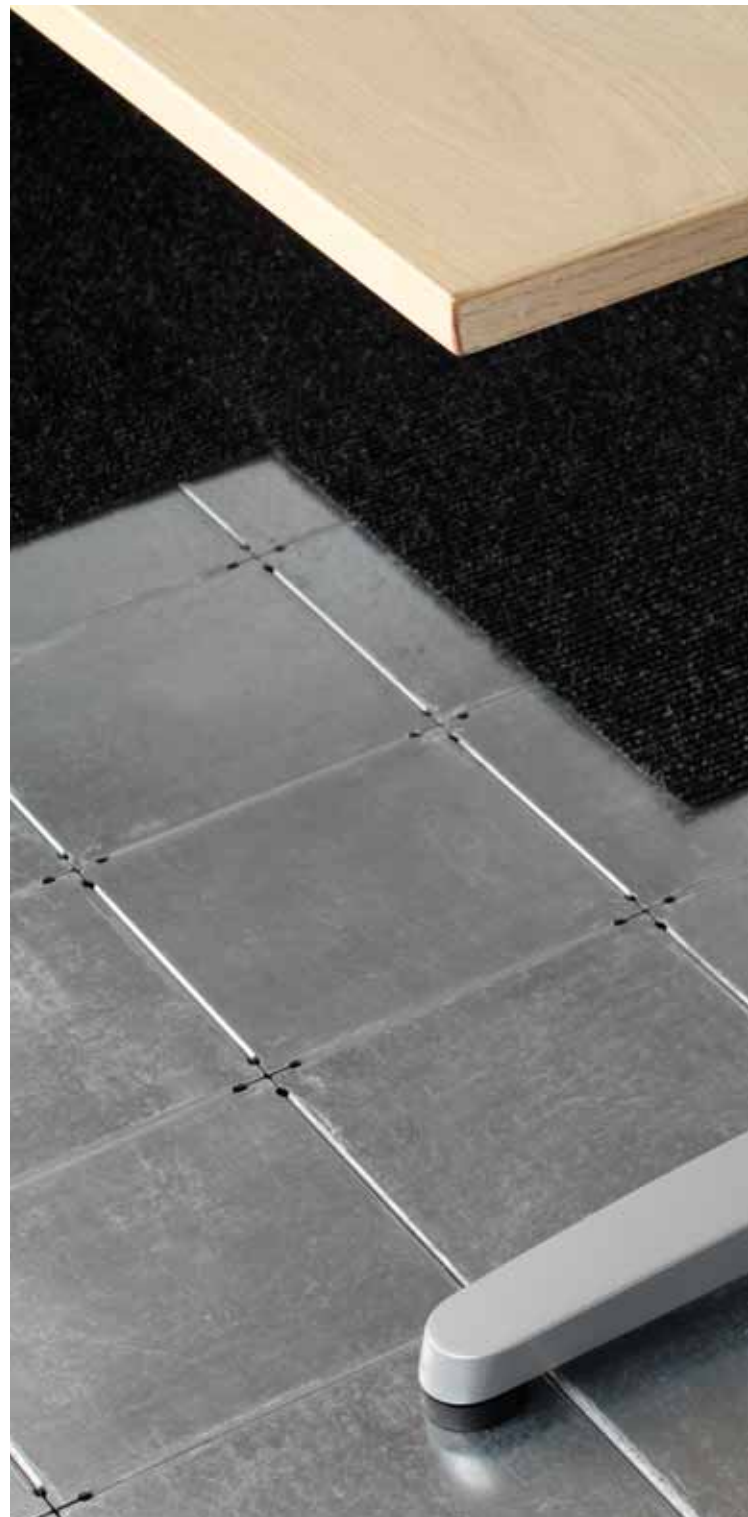
Soluflex offers considerable time-saving as floors and cables can be installed virtually simultaneously.

The supports and tiles are wear-resistant, offering long-term savings.

Adding or restructuring connection points can be done in a matter of minutes, without cutting or breaking cables.

Ideal for renovation

Ideal for use in existing buildings, Soluflex's non-invasive installation technique avoids damaging historic floors and includes a specially developed, ultra-low 37 mm system... the perfect lightweight solution to bring older buildings into the 21st century without compromising floor to ceiling height.



Whether modern or traditional, commercial installations demand flexibility... something that the new **Soluflex® cable management floor system** takes in its stride, offering endless cabling potential for the future.



Modern commercial developments



Traditional / refurbishment projects

The **choice** is yours

Combining cable management and flooring has never been easier. Choose from four low-level access flooring systems that can be instantly reconfigured to meet changing power and data needs.

■ Soluflex : 37 mm

Ideal for refurbishment where floor to ceiling space is limited.

The 37 mm version has been developed with renovation in mind... allowing old buildings to be brought up-to-date without affecting their traditional feel. The system enables all cabling to be installed in a compact void.

Power can be accessed from specially designed, flush mounting socket outlets, or by using cable snakes and power poles that are fed directly with power and data cables from under the floor.

■ Soluflex : 60 mm

Low level floor with underfloor power access.

In addition to the power and data solutions associated with the shallowest system, the 60 mm system also incorporates a twin socket outlet that allows electrical devices to be connected under the floor.

With a wide range of underfloor and surface mounted accessories, power, data and telecoms can be configured to meet bespoke requirements and can also be ordered from a selection of pre-wired options.

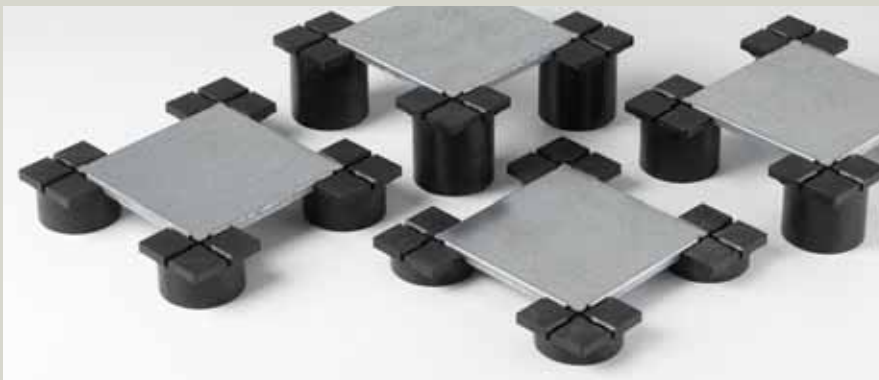
■ Soluflex : 90 and 120 mm

Increased cabling space, maximum options.

The 90 mm and 120 mm systems include enough room for bulk cabling and outlet units. Various floor boxes are available to include any combination of Arteor™* power, data, and A/V sockets and even RCD protection.

Built-in tiles are available to accept floor boxes. As with all the systems, there is also a wide selection of surface mounted options for power and data.

*For more information on Arteor™ please refer to the Legrand catalogue.



Four depths to meet installation requirements... simplicity, sustainability and flexibility

Access all areas

Where doors prevent elevation of the floor, or where disabled access is required, Soluflex ramps can be used to change from one floor height to another.



Summary of technical characteristics

Materials

- The tiles are made of pre-galvanised sheet steel.
- The supports are made of recycled polypropylene.

Safety

- Short circuits : Soluflex is earthed (as long as 1 earthing tile is installed per 100 m²).
- Fire resistance : Due to its low plenum height, the cable floor system is self-extinguishing. Tested according to BS EN 13501-1, class B(fl)S1-d0.

Weights and measures

- Dimensions of tiles : 225 x 225 mm, thickness 2 mm.
- Weight : approx. 20 kg per m².
- Point load per tile/support : 1500 Newton/25 mm².
- Uniformly distributed load of 3000 kg per m².

Acoustic

Flanking airborne sound insulation in accordance with ISO 717-1 : 1996

- Soluflex cable management floor system + carpet tiles, without mineral wool underneath the partition wall : $D_{n,f,w} = 48$ dB

Flanking impact sound insulation in accordance with ISO 717-2 : 1996

- Soluflex cable management floor system + carpet tiles, without mineral wool underneath the partition wall : $L_{n,f,w} = 49$ dB

Vertical impact sound insulation improvement in accordance with ISO 717-2 : 1996

- Tested in accordance with ISO 140-8 : 1978 Concrete floor 140 mm + Soluflex + carpet tiles
 $\Delta L_w = 24$ dB $\Delta l_{lin} = 12$ dB

Other characteristics

- The Soluflex cable management floor system feels extremely solid. Since the system is not adjustable in height, it needs no later adjustment.
- The grid layout of the system means the cables are perfectly parallel, and you can cross data cables at the required angle of 90°.

Integration... the perfect partners

Soluflex has been designed to integrate perfectly with Legrand's market leading cable management solutions and wiring devices...

From power columns to Cablofil steel wire cable tray, and from cavity floor boxes to Arteor™* power and data sockets, every solution can be installed in or under the floor.

*for more information on Arteor™ please refer to the Legrand catalogue

For complete flexibility of use, Soluflex can be integrated with a **wide range of power, data and Audio-Video accessories** that are ideal for the changing needs of today's offices and commercial installations



Cable snake : direct access to floor services



Mini-column: to bring power and data to the workstations



Flush mounting socket : ideal solution for cleaner sockets

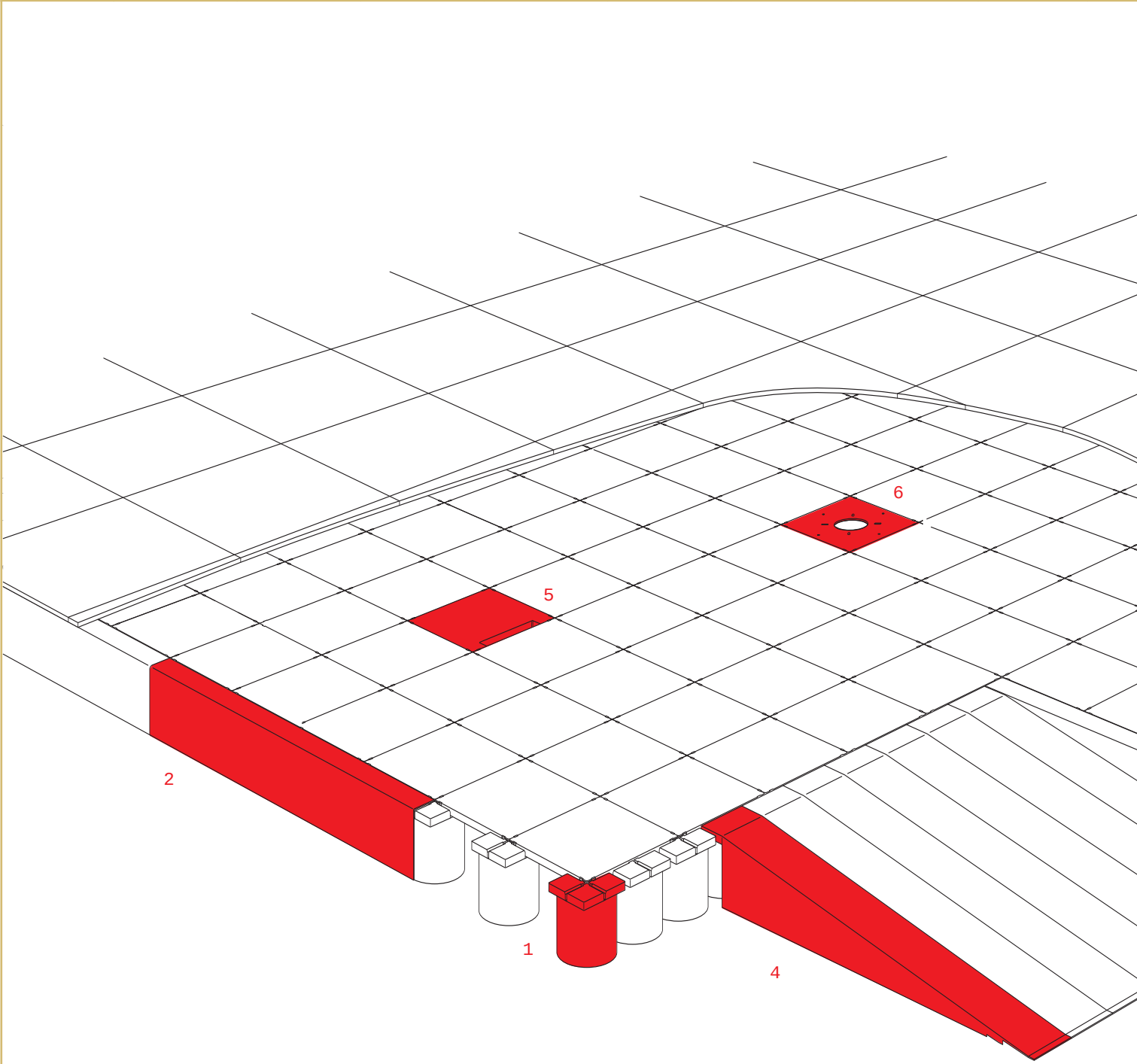


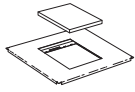
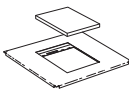
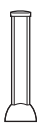
Underfloor twin socket : prevents accidental unplugging

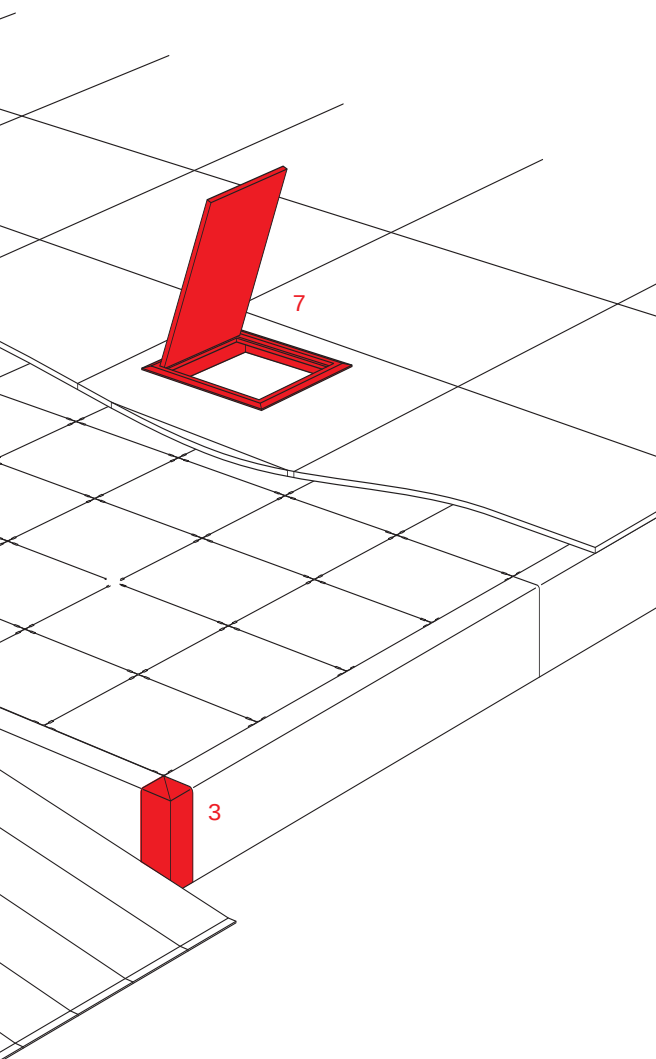
Floor boxes : Compatible with Legrand Arteor™ sockets

Soluflex® cable floor system selection chart

Height (mm)	Tile	Support	Double edge plate	Single edge plate	Step	Step corner	Ramp	Earthing tile
		 (1)			 (2)	 (3)	 (4)	
37	84000 10	84037 00	84000 60	84000 61	84037 22	84037 30	84037 40	84000 20
60	84000 10	84060 00	84000 60	84000 61	84060 22	84060 30	84060 40	84000 20
90	84000 10	84090 00	84000 60	84000 61	84090 22	84090 30	84090 40	84000 20
120	84000 10	84120 00	84000 60	84000 61	84120 22	84120 30	84120 40	84000 20



	Cable outlet tile	Accessory outlet tile	Fixing bracket	Fully - Submerged Arteor™ unit (empty)	Floor box tile*	Floor box tile**	Cable snake – black ⁽²⁾	Mini - column
	 (5)	 (6)			 For boxes 89606, 89620, 89621	 For boxes 89625, 89626 (7)		
	84000 30	84000 40	84000 50	–	–	–	81906 41	30729
	84000 30	84000 40	84000 50	84060 72	-	-	81906 41	30729
	84000 30	84000 40	84000 50	–	84090 85	8090 87	81906 41	30729
	84000 30	84000 40	84000 50	–	84090 85	8090 87	81906 41	30729



Cable snake

The cable snake creates neat, tidy work spaces by concealing cables between the floor and the desk.

For more information, contact us on 1300 369 777



Mini column

2 finishes available, aluminium or white.
To be equipped with supports for Arteor™ sockets

For more information contact us on 1300 369 777

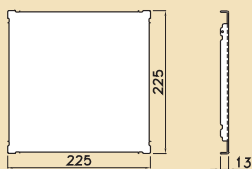


Soluflex® cable floor system dimensions

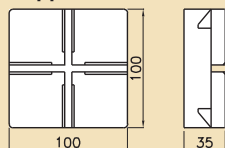
37 mm height

Dimensions (mm)

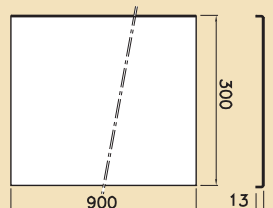
Tile



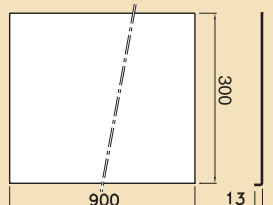
Support



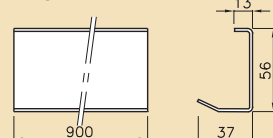
Double edge plate



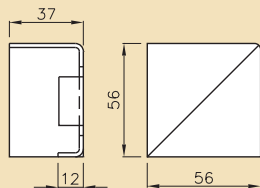
Single edge plate



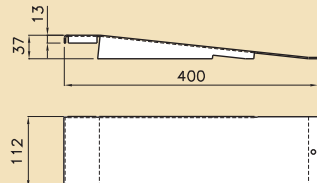
Step



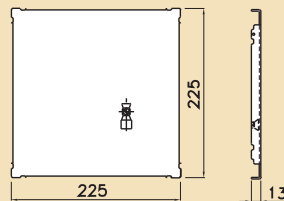
Step corner



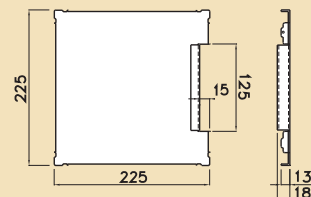
Ramp



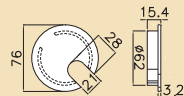
Earthing tile



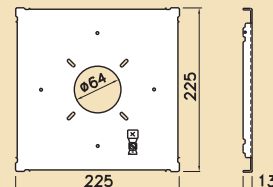
Cable outlet tile



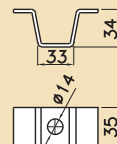
Chrome outlet grommet



Accessory outlet tile



Fixing bracket

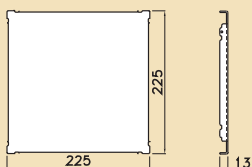


Soluflex® cable floor system dimensions

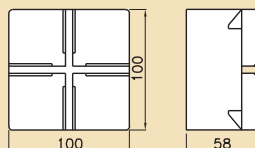
60 mm height

Dimensions (mm)

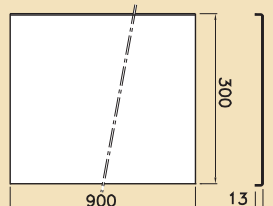
Tile



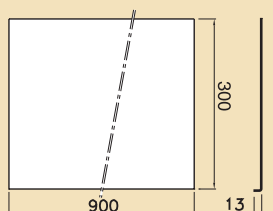
Support



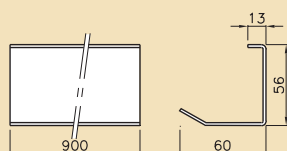
Double edge plate



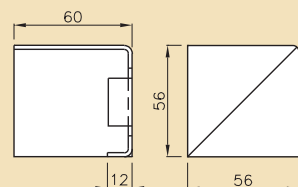
Single edge plate



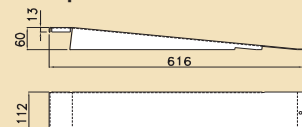
Step



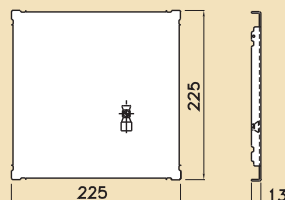
Step corner



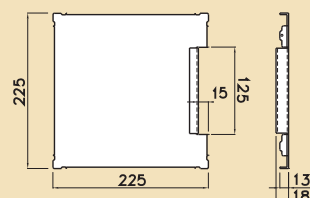
Ramp



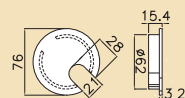
Earthing tile



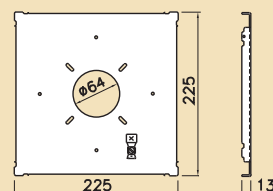
Cable outlet tile



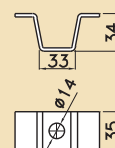
Chrome outlet grommet



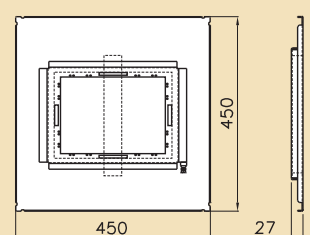
Accessory outlet tile



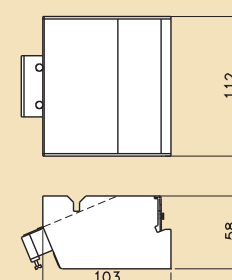
Fixing bracket



Floor box tile



Built-in Mosaic power unit 2 x 240 V (empty)

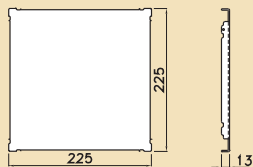


Soluflex® cable floor system dimensions

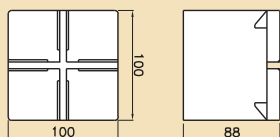
90 mm height

Dimensions (mm)

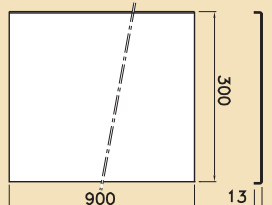
Tile



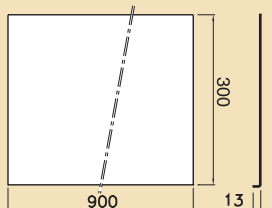
Support



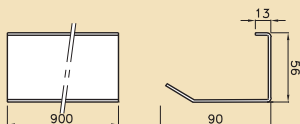
Double edge plate



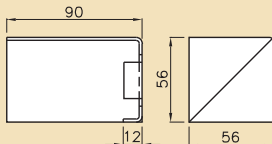
Single edge plate



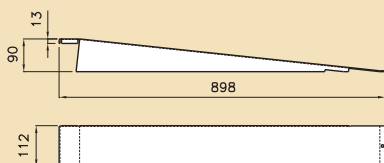
Step



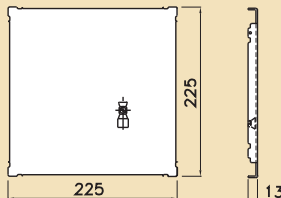
Step corner



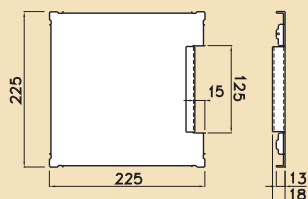
Ramp



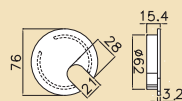
Earthing tile



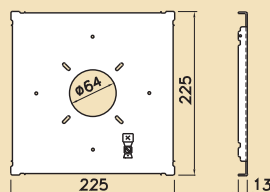
Cable outlet tile



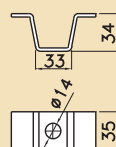
Chrome outlet grommet



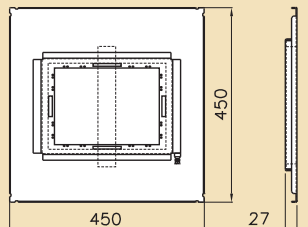
Accessory outlet tile



Fixing bracket



Floor box tile

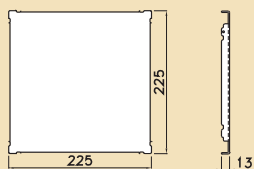


Soluflex® cable floor system dimensions

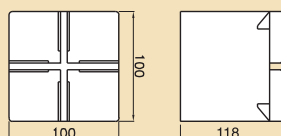
120 mm height

Dimensions (mm)

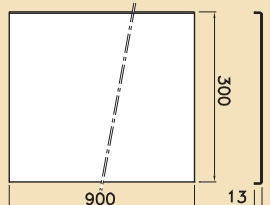
Tile



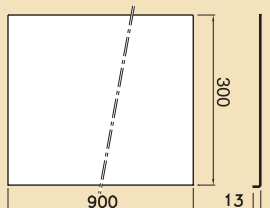
Support



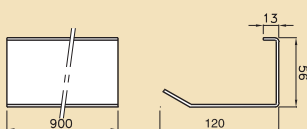
Double edge plate



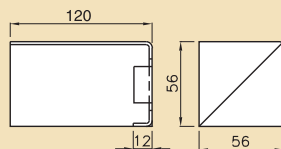
Single edge plate



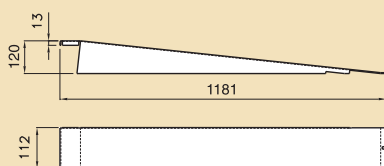
Step



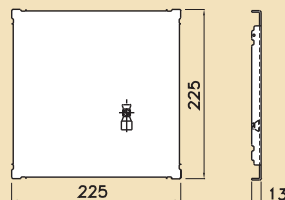
Step corner



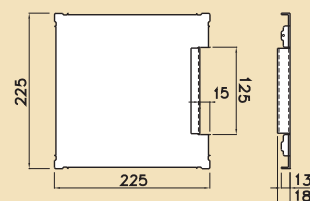
Ramp



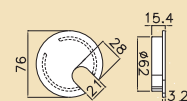
Earthing tile



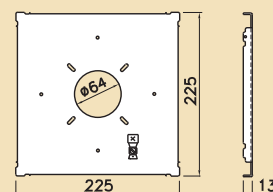
Cable outlet tile



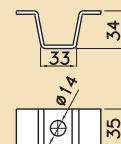
Chrome outlet grommet



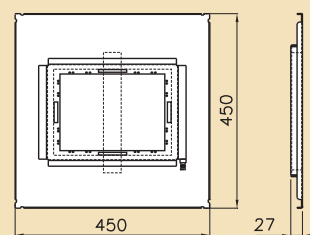
Accessory outlet tile



Fixing bracket



Floor box tile



Soluflex® cable floor system

technical information

Specification / technical data

Construction

The Soluflex cable floor system is constructed of a raised floor of tiles and supports with integrated cabling and connection points for telecoms, power and data

Materials

- The tiles are manufactured from pre-galvanised sheet steel in accordance with BS EN 10326
- The supports are made of recycled polypropylene. Inflammability class B2 according to DIN 4102

Weights and measures

- Dimensions of tiles : 225 x 225 mm
- Thickness = 2mm
- 4 different heights : 37 mm, 60 mm, 90 mm, 120 mm
Other heights available on request
- Weight of the Soluflex cable floor system : approx. 20 kg per m²

Load bearing data

- Point load per tile/support : 1500 Newton/25 mm²
- Equal divided load of 3000 kg per m²
- Minimum safety factor : $V = 1.71$

Acoustic

- **Flanking airborne sound insulation in accordance with ISO 717-1 : 1996**

Tested according to ISO 140-12 : 2000

Soluflex cable floor system + carpet tiles, without mineral wool underneath the partition wall : $D_{n,f,w} = 48$ dB
Soluflex cable floor system + carpet tiles, with mineral wool underneath the partition wall : $D_{n,f,w} = 48$ dB

- **Flanking impact sound insulation in accordance with ISO 717-2 : 1996**

Tested in accordance to ISO 140-12 : 2000

Soluflex cable floor system + carpet tiles, without mineral wool underneath the partition wall : $L_{n,f,w} = 49$ dB
Soluflex cable floor system + carpet tiles, with mineral wool underneath the partition wall : $L_{n,f,w} = 39$ dB

- **Vertical impact sound insulation improvement in accordance with ISO 717-2 : 1996**

Tested in accordance with ISO 140-8 : 1978

Concrete floor 140 mm + Soluflex

$\Delta L_w = 17$ dB $\Delta L_{lin} = 7$ dB

Concrete floor 140 mm + Soluflex + carpet tiles

$\Delta L_w = 24$ dB $\Delta L_{lin} = 12$ dB

Safety

- Safety against short circuits : Soluflex is earthed (as long as 1 earthing tile is installed per 100 m²)
- Fire resistance : due to its low plenum height Soluflex is self-extinguishing
Tested according to BS EN 13501-1, class B(fl)S1-d0

Other characteristics

The Soluflex cable floor system feels extremely solid. Since the system is not adjustable in height, it needs no later adjustment
The grid layout of the system means the cables are perfectly parallel, and you can cross data cables at the required angle of 90°

TNO-fire

Fire propagation

Its low plenum height enables the cable floor system to be self-extinguishing

NEN-EN 13501-1

B(fl) S1-d0

NEN 1775 :

A - Inflammability - complies with the class

T1 criteria for inflammability

B - Horizontal fire propagation : all heights

maximum horizontal fire propagation = 0 cm, which implies a critical density of heat flow of more than 11 kW/m²

Classification according to NEN 1775 : Class T1

NEN 6066 :

With (highest) heat flow supply of 50 kW/m² :

(highest) normative smoke density smaller than 0.5 m⁻¹, which is very little smoke production in case of fire

DIN 4102 :

Resistance to fire in accordance with DIN 4102 Class B1

Level floor

The sub-floor must be dry, clean and level, suitable for laying carpet. If the floor is not level, it must be levelled before you start to install the Soluflex cable floor system. Please contact your floor specialist for professional advice

Earthing

The cable floor system is automatically earthed, provided that 1 earthing tile is installed per 100 m². Install an earthing tile every 14 m length in gangways

Soluflex® cable floor system general installation instructions

Installing the Soluflex cable floor system

- Start with a dry, clean and level sub-floor that is suitable for laying normal carpet. If the floor does not meet these requirements, level it first
- Start in the corner of the room and click the tiles into the plastic supports. Leave a 10 mm gap between the wall and tile to allow for expansion. Continue to build the floor like this and cut fitting tiles or edge plates to size
- You are now ready to open the cable routes using your cabling plan. Make sure that the cables are not placed under proposed locations of filing cabinets or other furniture as this limits flexibility
- The corners of the tiles have small recesses to enable them to be lifted using a screwdriver. Once one tile has been removed, the others can be removed by hand
- Now place the power track or cables into the cable routes, taking into account any extra cabling requirements for future flexibility
- By installing more outlet boxes you will be able to realise extra connections without interruption later
- Dependent on the floor height being installed, a choice can be made from various (pre-wired) outlet units in or on the cable floor
- Earth the cable floor system every 100 m² by means of an earthing tile
- In stretched areas such as corridors, place an earthing tile at least every 14 metres
- The electrical installation should always be carried out by a qualified electrician in conjunction with the requirements of the latest wiring regulations
- To create 'islands', install steps with step corners to ensure a neat finishing of the system
- The ramp provides a constant transition from an existing floor to the Soluflex cable floor system
- The entire system can easily be dismantled and installed again as required, giving Soluflex a virtually unlimited life
- The finished installation can then be covered with rubber, stone, wood or carpet tiles
- Finishing with carpet tiles is advised for true flexibility and accessibility of the system

Ramp



Cable routes



Completed Soluflex installation



Finished example with carpet tiles





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