

# Soluflex® cavity 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 10346
- The supports are made of polypropylene. Inflammability class B2 according to DIN 4102

#### Weights and measures

- Dimensions of tiles : 225 x 225 mm
- 4 different heights : 37 mm, 60 mm, 90 mm, 120 mm  
Other heights available on request (50, 70, 80 and 150 mm)
- Weight of the Soluflex cable floor system : approx. 20 kg per m<sup>2</sup>

#### ■ Load bearing data

- Point load per tile/support : 1 500 Newton/25 mm<sup>2</sup>
- Equal divided load of 3 000 kg per m<sup>2</sup>
- Minimum safety factor : V = 1.71

#### ■ Sound measurements

The sound measurements have been carried out in the laboratory of consultancy firm Peutz & Associates. The complete report can be obtained from our sales department

#### 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 : Dn,f,w = 48 dB

Soluflex cable floor system + carpet tiles, with mineral wool underneath the partition wall : Dn,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 : Ln,f,w = 49 dB

Soluflex cable floor system + carpet tiles, with mineral wool underneath the partition wall : Ln,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

□Lw = 17 dB      □Iln = 7 dB

Concrete floor 140 mm + Soluflex + carpet tiles

□Lw = 24 dB      □Iln = 12 dB

Tested to : PSA MOB PF2PS/SPU

BS EN 12825 : 2001

Working load : 1.9kN

Ultimate load above 12kN	Deflection under working load	Safety factor	Class of tolerance in manufacture
1	A	3	1

Working load : 2.9kN

Ultimate load above 12kN	Deflection under working load	Safety factor	Class of tolerance in manufacture
1	B	2	1

### ■ Safety

- Safety against short circuits : Soluflex is earthed (as long as 1 earthing tile is installed per 100 m<sup>2</sup>)
- 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/m<sup>2</sup>  
Classification according to NEN 1775 : Class T1

### NEN 6066 :

With (highest) heat flow supply of 50 kW/m<sup>2</sup> :

(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

### ■ KEMA-certificate

Soluflex cable floor system has been certified by KEMA and meets the requirements for mechanical and electrical safety

### Earthing

The cable floor system is automatically earthed, provided that 1 earthing tile is installed per 100 m<sup>2</sup>. Install an earthing tile every 14 m length in gangways



# Soluflex<sup>®</sup> cavity 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 create 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 m<sup>2</sup> 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**

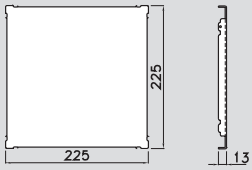


# Soluflex<sup>®</sup> cavity floor system

37 mm, 60 mm, 90 mm, 120 mm height

## ■ Dimensions (mm)

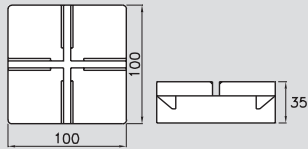
### Tile



Cat. No. 8400010

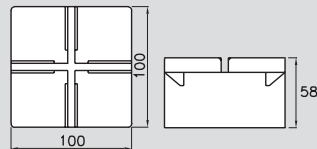
### Supports

For 37 mm height



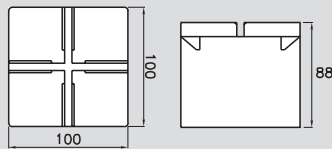
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For 60 mm height



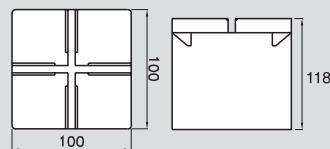
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For 90 mm height



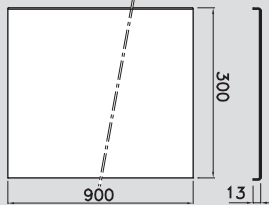
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For 120 mm height



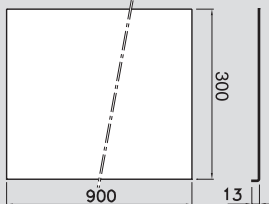
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### Double edge plate



Cat. No. 8400060

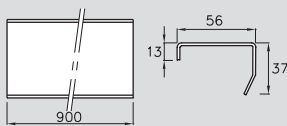
### Single edge plate



Cat. No. 8400061

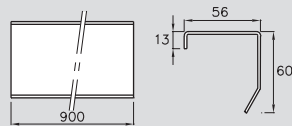
### Steps

For 37 mm height



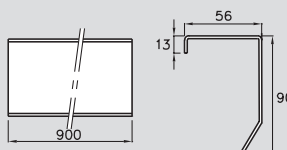
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For 60 mm height



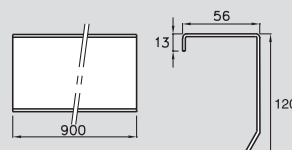
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For 90 mm height



Cat. No. 8409022

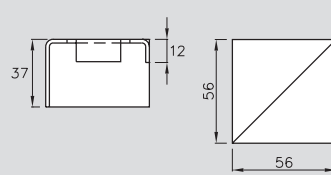
For 120 mm height



Cat. No. 8412022

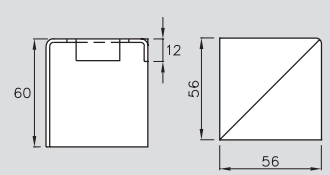
### Step corner

For 37 mm height



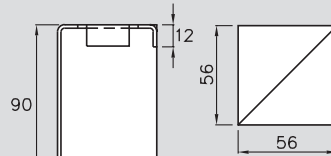
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For 60 mm height



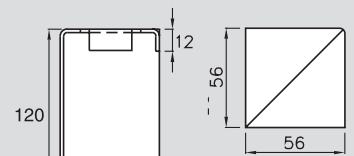
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For 90 mm height



Cat. No. 8409030

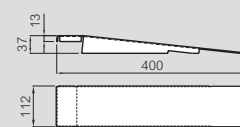
For 120 mm height



Cat. No. 8412030

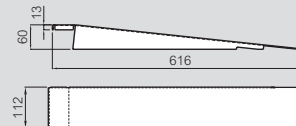
### Ramp

For 37 mm height



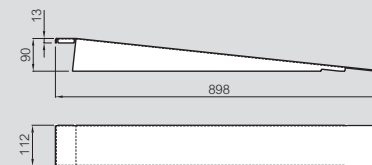
Cat. No. 8403740

For 60 mm height



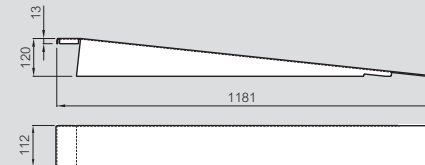
Cat. No. 8406040

For 90 mm height



Cat. No. 8409040

For 120 mm height



Cat. No. 8412040

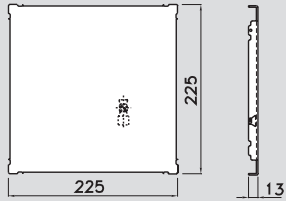
All dimensions (mm) are nominal

# Soluflex<sup>®</sup> cavity floor system

37 mm, 60 mm, 90 mm, 120 mm height (continued)

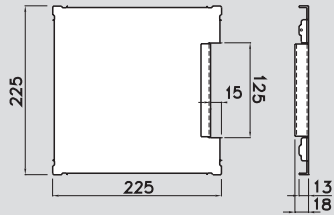
## Dimensions (mm)

### Earthing tile



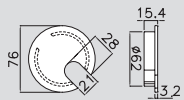
Cat. No. 8400020

### Cable outlet tile



Cat. No. 8400030

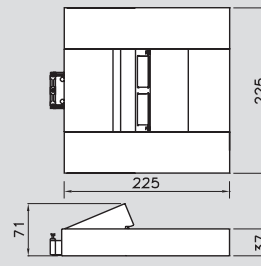
### Chrome outlet grommet



Cat. No. 8190232

### Semi-submerged unit

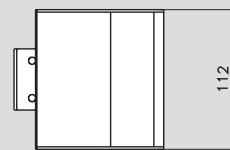
For 37 mm range only



Cat. Nos. 8403750 Power  
8403751 Data

### Fully submerged power unit 2 x 240 V (empty)

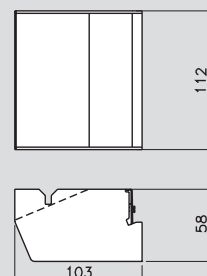
For 60 mm range only



Cat. No. 8406072

### Fully submerged data unit 2 x 2 data (empty)

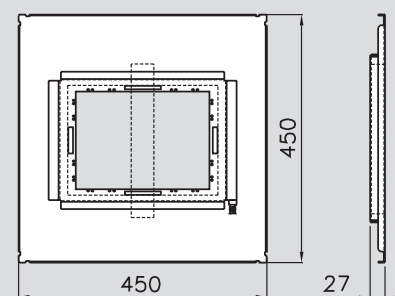
For 60 mm range only



Cat. No. 8406073

### Floor box tile

For 60 mm, 90 mm, 120 mm ranges only



Cat. No. 8409081

All dimensions (mm) are nominal