



# 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. Globally, Legrand holds 19% of the wiring devices market and 15% of the cable management market.

#### Innovation for progress

Legrand invests heavily in research and development. It has around 1,800 people throughout the world inventing, designing, testing and validating new ideas.

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

#### Sustainable development

Legrand relies heavily on its core values and on the expertise of its teams to ensure profitable, long-lasting and responsible growth... combining long-term performance with environmental conservation and the valuing of human resources.



#### 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.



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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

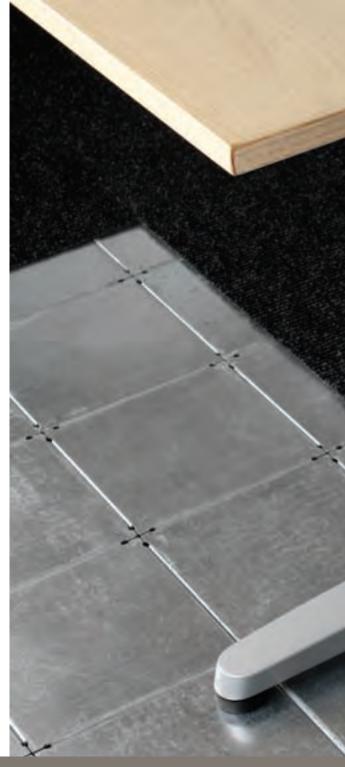
Soluflex offers considerable time-saving as floors and cables can be installed virtually simultaneously.

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... often without the need to shut down power or data.

#### 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

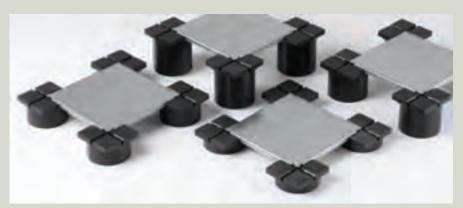
Low level floor with underfloor power access. In addition to the power and data solutions associated with the shallowest system, the 60 mm system also incorporates a twin socket outlet that allows electrical devices to be connected under the floor.

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 in prewired and configurable formats to include any combination of power, data and even RCD protection.

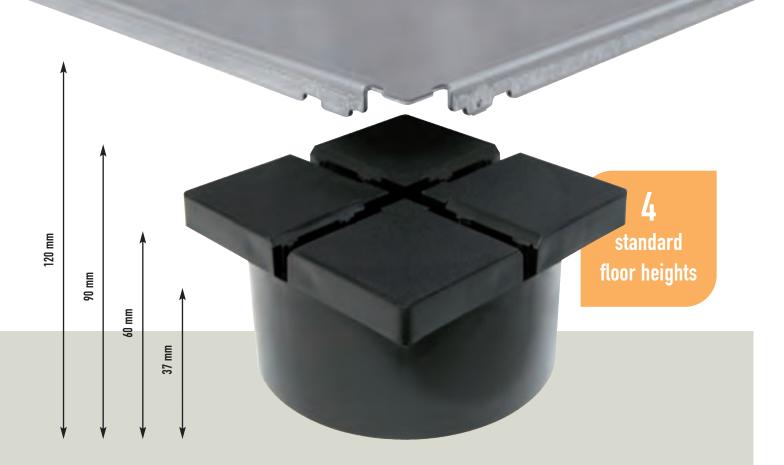
Built-in tiles are available to accept floor boxes. As with all the systems, there is also a wide selection of surface mounted options for power and data.



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 m<sup>2</sup>.
- 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 : Dn,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 : Ln,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
 △Lw = 24 dB △llin = 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 ultra-compact power track systems to steel wire cable tray, and from cavity floor boxes to Mosaic power and data sockets, every solution can be installed in or under the floor.

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





Cable snake : direct access to floor services



Slab box : RCD protection



Flush mounting socket : ideal solution for cleaner sockets





### Soluflex® cable floor system selection chart

Height (mm)	Tile	Support	Double edge plate	Single edge plate	Step	Step corner	Ramp	Earthing tile	
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	

Height (mm)	Floor box tile	Floor box lid + trim	3 comp. twin socket module	4 comp. twin socket module	3 comp. blank module	4 comp. blank module	3 comp. data module	4 comp. data module	
37	_	-	-	-	_	-	-	-	
60	84090 81	8218 21	8218 22	8218 23	8218 24	8218 25	8218 26	8218 27	
90	84090 81	8218 21	8218 22	8218 23	8218 24	8218 25	8218 26	8218 27	
120	84090 81	8218 21	8218 22	8218 23	8218 24	8218 25	8218 26	8218 27	

#### ■ Floor boxes with lid & trim assemblies :

Suitable for 60, 90 and 120 mm systems



Specials also available, including RCD and RCBO options to comply with 17th Edition requirements





Cable outlet tile	Chrome outlet grommet	Accessory outlet tile	Fixing bracket	Built-in Mosaic power unit 2 x 240 V (empty)	Built-in Mosaic data unit 2 x 2 data (empty)	Fully submerged Mosaic power unit 2 x 240 V (empty)	Fully submerged Mosaic data unit 2 x 2 data (empty)
No. 10							
84000 30	81902 32	84000 40	84000 50	84037 50	84037 51	-	-
84000 30	81902 32	84000 40	84000 50	-	_	84060 72	84060 73
84000 30	81902 32	84000 40	84000 50	-	_	-	-
84000 30	81902 32	84000 40	84000 50	_	_	-	_

RCD slab box	Single socket outlet tile	Brushed chrome floor plate(1)	Polished chrome floor plate(1)	Satin brass chrome floor plate <sup>(1)</sup>	Cable snake – grey <sup>(2)</sup>	Cable snake – black <sup>(2)</sup>	Power pole <sup>(3)</sup>
-	-	7331 97	7333 97	7335 97	81906 40	81906 41	86502 10
8218 29	8218 28	7331 97	7333 97	7335 97	81906 40	81906 41	86502 10
8218 29	8218 28	7331 97	7333 97	7335 97	81906 40	81906 41	86502 10
8218 29	8218 28	7331 97	7333 97	7335 97	81906 40	81906 41	86502 10

#### **■** 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 0845 605 4333



#### ■ Power pole

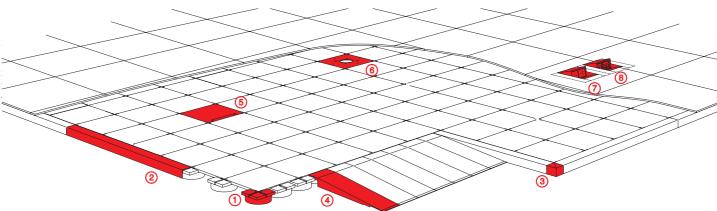
Multiple configurations available to special order. Contact us on 0845 605 4333



<sup>(1)</sup> For use with single socket outlet tile. Shown with Mosaic 13 A socket, Cat. No. 0741 40 (order separately). For the full range of Mosaic options, please refer to the current Legrand catalogue
(2) For use with accessory outlet tile or cable outlet tile
(3) For use with accessory outlet tile. Standard version shown. Requires back box, Cat. No. 8218 30. Other configurations available to special order. Contact us on 0845 605 4333



## Soluflex® cable floor system 37 mm height



Selection table (page 12–13) Installation instructions (page 24) Dimensions (page 25)

Pack	Cat. Nos.	Floor parts	Pack	Cat. Nos.	Floor parts (continued)
1	84000 10	Tile Pre-galvanised 225 mm x 225 mm Height 13 mm Provided with 4 contact/distance projections	1	84000 20	Earthing tile Pre-galvanised 225 mm x 225 mm Height 13 mm Earthing clamp 6 mm² (ma 1 tile per 100 m² or in gang
1	84037 00	Support ①  Black Polypropylene 100 mm x 100 mm With 2 grooves in which tiles can be positioned	1	84000 30	max. 14 metres apart Provided with 4 contact/di  Cable outlet tile (5) Pre-galvanised 225 mm x 225 mm Height 13 mm
1	84000 60	Double edge plate  Pre-galvanised Length 900 mm, width 300 mm 2 x turned sides of 13 mm Used to finish installation against wall Trim to size on site	1	81902 32	Access 125 x 15 mm For cable access to work : Provided with 4 contact/di  Chrome outlet grommet Chromed
1	84000 61	Single edge plate Pre-galvanised Length 900 mm, width 300 mm 1 x turned side of 13 mm Used to finish installation against wall Trim to size on site	1		Apply with accessory outlie Cat. No. 84000 40 For cable access to work:  Accessory outlet tile (8) Pre-galvanised 225 mm x 225 mm Height 13 mm
1	84037 22	Step ② Pre-galvanised Height 37 mm, length 900 mm, width 56 mm For edging the floor to create a step			For power poles, pedestal cable snake (contact us o 0845 605 4333) and chror (Cat. No. 81902 32) Provided with 4 contact/di
1	84037 30	Step corner ③ Pre-galvanised 56 x 56 mm Use in conjunction with 84037 22	1	84000 50	Fixing bracket Pre-galvanised For mounting column (cor 0845 605 4333) on to the accessory outlet tile Cat. I
1	84037 40	Ramp 4 Pre-galvanised Ramp 10% Length 400 mm, width 112 mm Include 1 extra support Cat. No. 84037 00 per tile			

1	84000 20	Earthing tile  Pre-galvanised 225 mm x 225 mm  Height 13 mm  Earthing clamp 6 mm² (max.)  1 tile per 100 m² or in gangways max. 14 metres apart  Provided with 4 contact/distance projections
1	84000 30	Cable outlet tile (5) Pre-galvanised 225 mm x 225 mm Height 13 mm Access 125 x 15 mm For cable access to work station Provided with 4 contact/distance projections
1	81902 32	Chrome outlet grommet Chromed Apply with accessory outlet tile Cat. No. 84000 40 For cable access to work station
1	84000 40	Accessory outlet tile (6) Pre-galvanised 225 mm x 225 mm Height 13 mm For power poles, pedestals + cable snake (contact us on 0845 605 4333) and chrome outlet grommet (Cat. No. 81902 32) Provided with 4 contact/distance projections
1	84000 50	Fixing bracket  Pre-galvanised For mounting column (contact us on 0845 605 4333) on to the floor with accessory outlet tile Cat. No. 84000 40



## Soluflex® cable floor system 37 mm height (continued)

#### Soluflex® cable floor system

mounting drawings 37 mm height

■ Installation examples Power pole with accessory outlet tile and fixing bracket



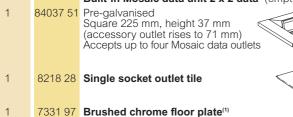
Pack



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Ø	

Cat. Nos.	Floor parts (continued)
84037 50	Built-in Mosaic power unit 2 x 240 V (empty) Pre-galvanised Square 225 mm, height 37 mm (accessory outlet rises to 71 mm) Provided with connection terminal and strain relief Pre-wirable for 2 x Mosaic 13 A socket outlets
84037 51	Built-in Mosaic data unit 2 x 2 data (empty)  Pre-galvanised Square 225 mm, height 37 mm (accessory outlet rises to 71 mm)



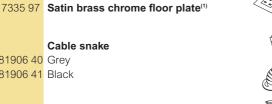
7333 97 Polished chrome floor plate(1)

81906 40 Grey 81906 41 Black

86502 10 Power pole

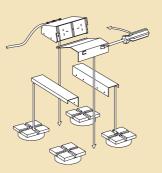
8218 30 Power pole backbox



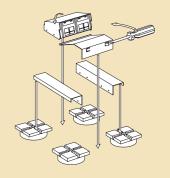




Positioning of power outlet units



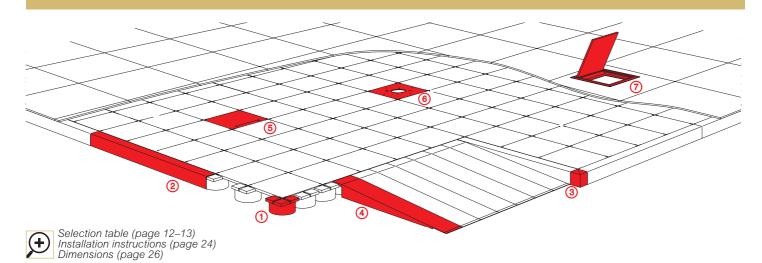
Positioning of data outlet units



(1) For use with single socket outlet tile. Shown with Mosaic 13 A socket, Cat. No. 0741 40 (order separately). For the full range of Mosaic options, please refer to the current Legrand catalogue



## Soluflex® cable floor system 60 mm height



DII	rierisioris (	page 20)
Pack	Cat. Nos.	Floor parts
1	84000 10	Tile Pre-galvanised 225 mm x 225 mm Height 13 mm Provided with 4 contact/distance projections
1	84060 00	Support ①  Black Polypropylene 100 mm x 100 mm With 2 grooves in which tiles can be positioned
1	84000 60	Double edge plate Pre-galvanised Length 900 mm, width 300 mm 2 x turned sides of 13 mm Used to finish installation against wall Trim to size on site
1	84000 61	Single edge plate Pre-galvanised Length 900 mm, width 300 mm 1 x turned side of 13 mm Used to finish installation against wall Trim to size on site
1	84060 22	Step ② Pre-galvanised Height 60 mm, length 900 mm, width 56 mm For edging the floor to create a step
1	84060 30	Step corner ③ Pre-galvanised 56 x 56 mm Use in conjunction with 84037 22
1	84060 40	Ramp 4 Pre-galvanised Ramp 10% Length 616 mm, width 112 mm Include 1 extra support Cat. No. 84037 00 per tile

Pack	Cat. Nos.	Floor parts (continued)
1	84000 20	Earthing tile  Pre-galvanised 225 mm x 225 mm  Height 13 mm Earthing clamp 6 mm² (max.) 1 tile per 100 m² or in gangways max. 14 metres apart Provided with 4 contact/distance projections
1	84000 30	Cable outlet tile (5) Pre-galvanised 225 mm x 225 mm Height 13 mm Access 125 x 15 mm For cable access to work station Provided with 4 contact/distance projections
1	81902 32	Chrome outlet grommet Chromed Apply with accessory outlet tile Cat. No. 84000 40 For cable access to work station
1	84000 40	Accessory outlet tile (6) Pre-galvanised 225 mm x 225 mm Height 13 mm For power poles, pedestals + cable snake (contact us on 0845 605 4333) and chrome outlet grommet (Cat. No. 81902 32) Provided with 4 contact/distance projections
1	84000 50	Fixing bracket  Pre-galvanised For mounting column (contact us on 0845 605 4333) on to the floor with accessory outlet tile Cat. No. 84000 40
1	84060 72	Fully submerged Mosaic power unit 2 x 240 V (empty) Pre-galvanised Provided with connection terminal Pre-wirable for 2 x Mosaic built-in Combine with cable outlet tile Cat. No. 84000 30
1	84060 73	Fully submerged Mosaic data unit 2 x 2 data Pre-galvanised For built-in double Mosaic data Combine with cable outlet tile Cat. No. 84000 30



## Soluflex® cable floor system 60 mm height (continued)

#### Soluflex® cable floor system

mounting drawings

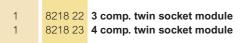
60 mm height





Pack	Cat. Nos.	Floor parts (continued)	
1	84090 81	Floor box tile Pre-galvanised 450 mm x 450 mm For lid + trim assembly Cat. No. 8218 21 Including wooden disposable cover	











1	7331 97	Brushed chrome floor plate <sup>(1)</sup>
1	7333 97	Polished chrome floor plate <sup>(1)</sup>
1	7335 97	Satin brass chrome floor plate(1)

8218 29 RCD slab box

		Cable snake
1	81906 40	Grey

81906 41 Black

86502 10 Power pole

8218 30 Power pole backbox





















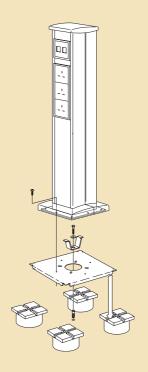




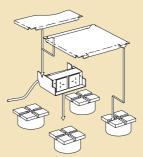


■ Installation examples

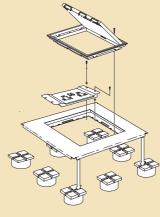
Power pole with accessory outlet tile and fixing bracket



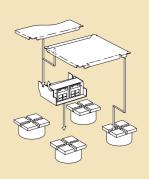
Submerged Mosaic power unit with cable outlet tile



Floor box lid and trim with floor box tile



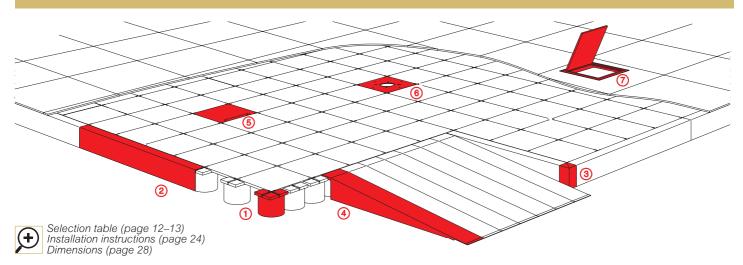
Fully submerged Mosaic data unit with cable outlet



<sup>(1)</sup> For use with single socket outlet tile. Shown with Mosaic 13 A socket, Cat. No. 0741 40 (order separately). For the full range of Mosaic options, please refer to the current Legrand catalogue



## Soluflex® cable floor system 90 mm height



Pack	Cat. Nos.	Floor parts
1	84000 10	Tile Pre-galvanised 225 mm x 225 mm Height 13 mm Provided with 4 contact/distance projections
1	84060 00	Support ①  Black Polypropylene 100 mm x 100 mm With 2 grooves in which tiles can be positioned
1	84000 60	Double edge plate Pre-galvanised Length 900 mm, width 300 mm 2 x turned sides of 13 mm Used to finish installation against wall Trim to size on site
1	84000 61	Single edge plate Pre-galvanised Length 900 mm, width 300 mm 1 x turned side of 13 mm Used to finish installation against wall Trim to size on site
1	84090 22	Step ② Pre-galvanised Height 60 mm, length 900 mm, width 56 mm For edging the floor to create a step
1	84090 30	Step corner ③ Pre-galvanised 56 x 56 mm Use in conjunction with 84037 22
1	84090 40	Ramp 4  Pre-galvanised Ramp 10% Length 898 mm, width 112 mm Include 1 extra support Cat. No. 84037 00 per tile

	Pack	Cat. Nos.	Floor parts (continued)
>	1	84000 20	Earthing tile Pre-galvanised 225 mm x 225 mm Height 13 mm Earthing clamp 6 mm² (max.) 1 tile per 100 m² or in gangways max. 14 metres apart Provided with 4 contact/distance projections
>	1	84000 30	Cable outlet tile (5) Pre-galvanised 225 mm x 225 mm Height 13 mm Access 125 x 15 mm For cable access to work station Provided with 4 contact/distance projections
	1	81902 32	Chrome outlet grommet Chromed Apply with accessory outlet tile Cat. No. 84000 40 For cable access to work station
>	1	84000 40	Accessory outlet tile (6) Pre-galvanised 225 mm x 225 mm Height 13 mm For power poles, pedestals + cable snake (contact us on 0845 605 4333) and chrome outlet grommet (Cat. No. 81902 32) Provided with 4 contact/distance projections
	1	84000 50	Fixing bracket  Pre-galvanised For mounting column (contact us on 0845 605 4333) on to the floor with accessory outlet tile Cat. No. 84000 40



## Soluflex® cable floor system 90 mm height (continued)

#### Soluflex® cable floor system

mounting drawings

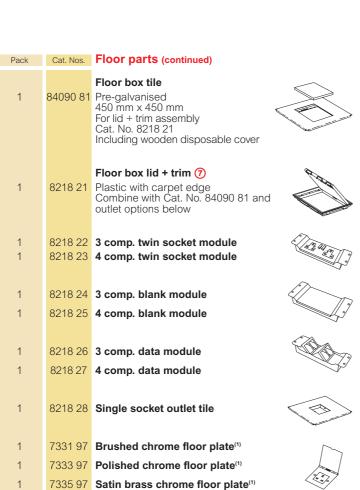
■ Installation examples

90 mm height









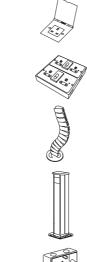
8218 29 RCD slab box

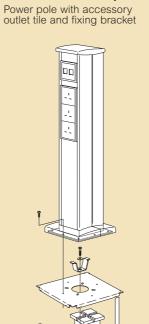
81906 40 Grey 81906 41 Black

86502 10 Power pole

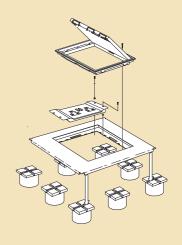
Cable snake

8218 30 Power pole backbox





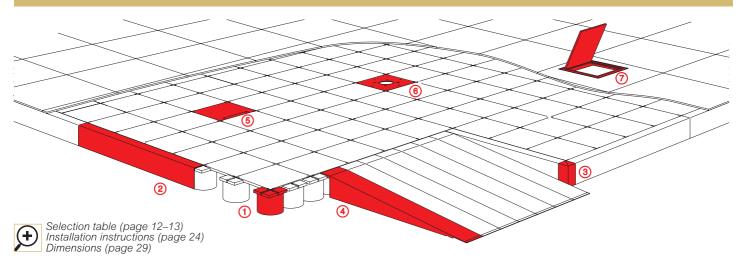
Floor box lid and trim with floor box tile



<sup>(1)</sup> For use with single socket outlet tile. Shown with Mosaic 13 A socket, Cat. No. 0741 40 (order separately). For the full range of Mosaic options, please refer to the current Legrand catalogue



## Soluflex® cable floor system 120 mm height



Pack	Cat. Nos.	Floor parts
1	84000 10	Tile Pre-galvanised 225 mm x 225 mm Height 13 mm Provided with 4 contact/distance projections
1	84120 00	Support ① Black Polypropylene 100 mm x 100 mm With 2 grooves in which tiles can be positioned
1	84000 60	Double edge plate Pre-galvanised Length 900 mm, width 300 mm 2 x turned sides of 13 mm Used to finish installation against wall Trim to size on site
1	84000 61	Single edge plate Pre-galvanised Length 900 mm, width 300 mm 1 x turned side of 13 mm Used to finish installation against wall Trim to size on site
1	84120 22	Step ② Pre-galvanised Height 60 mm, length 900 mm, width 56 mm For edging the floor to create a step
1	84120 30	Step corner ③ Pre-galvanised 56 x 56 mm Use in conjunction with 84037 22
1	84120 40	Ramp 4  Pre-galvanised Ramp 10% Length 1181 mm, width 112 mm Include 1 extra support Cat. No. 84037 00 per tile

Pack	Cat. Nos.	Floor parts (continued)
1	84000 20	Earthing tile  Pre-galvanised 225 mm x 225 mm  Height 13 mm  Earthing clamp 6 mm² (max.) 1 tile per 100 m² or in gangways max. 14 metres apart  Provided with 4 contact/distance projections
1	84000 30	Cable outlet tile (5)  Pre-galvanised 225 mm x 225 mm  Height 13 mm  Access 125 x 15 mm  For cable access to work station  Provided with 4 contact/distance projections
1	81902 32	Chrome outlet grommet Chromed Apply with accessory outlet tile Cat. No. 84000 40 For cable access to work station
1	84000 40	Accessory outlet tile (6)  Pre-galvanised 225 mm x 225 mm  Height 13 mm  For power poles, pedestals + cable snake (contact us on 0845 605 4333) and chrome outlet grommet (Cat. No. 81902 32)  Provided with 4 contact/distance projections
1	84000 50	Fixing bracket  Pre-galvanised For mounting column (contact us on 0845 605 4333) on to the floor with accessory outlet tile Cat. No. 84000 40



## Soluflex® cable floor system 120 mm height (continued)

#### Soluflex® cable floor system

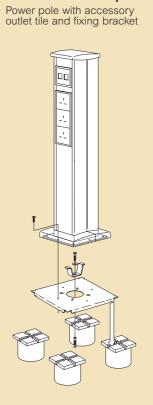
mounting drawings 120 mm height

■ Installation examples

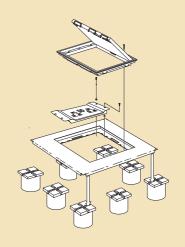
## 84000 10

84120 00

Pack	Cat. Nos.	Floor parts (continued)	
1	84090 81	Floor box tile Pre-galvanised 450 mm x 450 mm For lid + trim assembly Cat. No. 8218 21 Including wooden disposable cover	
1	8218 21	Floor box lid + trim 7  Plastic with carpet edge Combine with Cat. No. 84090 81 and outlet options below	
1	8218 22	3 comp. twin socket module	()-m
1		4 comp. twin socket module	E & 40 19 7 3
1		3 comp. blank module 4 comp. blank module	
1	2212 26	3 comp. data module	SODA
1		4 comp. data module	
1		Single socket outlet tile	
1	7331 97	Brushed chrome floor plate <sup>(1)</sup>	
1	7333 97	Polished chrome floor plate <sup>(1)</sup>	
1	7335 97	Satin brass chrome floor plate <sup>(1)</sup>	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
1	8218 29	RCD slab box	
4	04000 40	Cable snake	A
1 1	81906 40 81906 41	,	
1	86502 10	Power pole	



Floor box lid and trim with floor box tile



8218 30 Power pole backbox

<sup>(1)</sup> For use with single socket outlet tile. Shown with Mosaic 13 A socket, Cat. No. 0741 40 (order separately). For the full range of Mosaic options, please refer to the current Legrand catalogue



#### 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 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
- Weight of the Soluflex cable floor system: approx. 20 kg per m<sup>2</sup>

#### ■ Load bearing data

- Point load per tile/support: 1500 Newton/25 mm²
- Equal divided load of 3000 kg per m<sup>2</sup>
- 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 : 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 □Ilin = 7 dB

Concrete floor 140 mm + Soluflex + carpet tiles

□Lw = 24 dB □Ilin = 12 dB

#### ■ Sound measurements

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

#### 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

#### **■ 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 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 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 dismounted 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

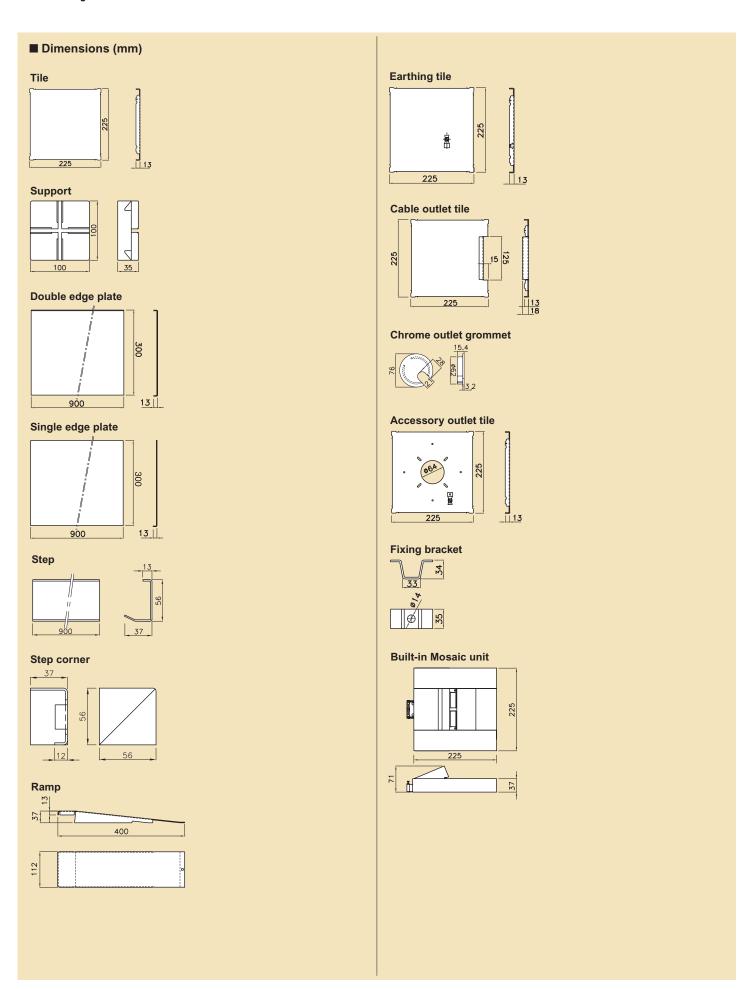


Finished example with carpet tiles



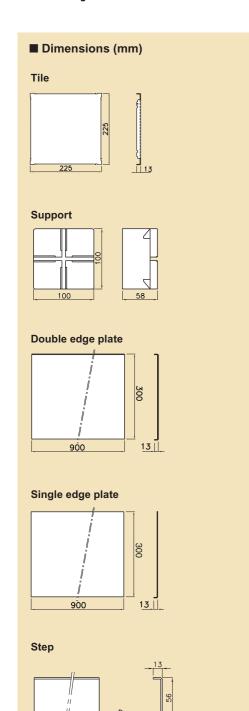


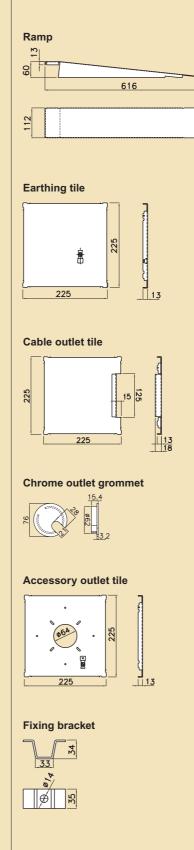
## Soluflex® cable floor system dimensions 37 mm height



## **L**legrand

## Soluflex® cable floor system dimensions 60 mm height





Step corner

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



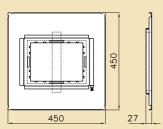


#### Built-in Mosaic data unit 2 x 2 data (empty)



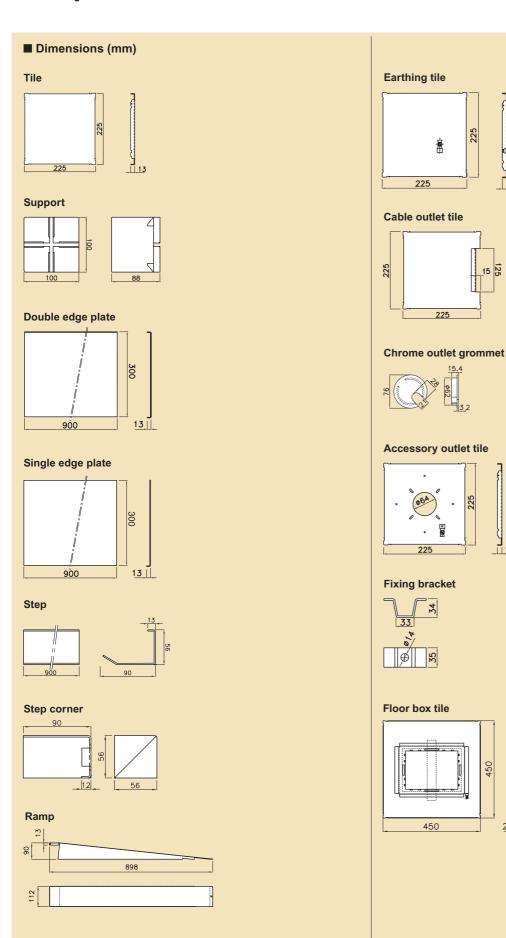


#### Floor box tile



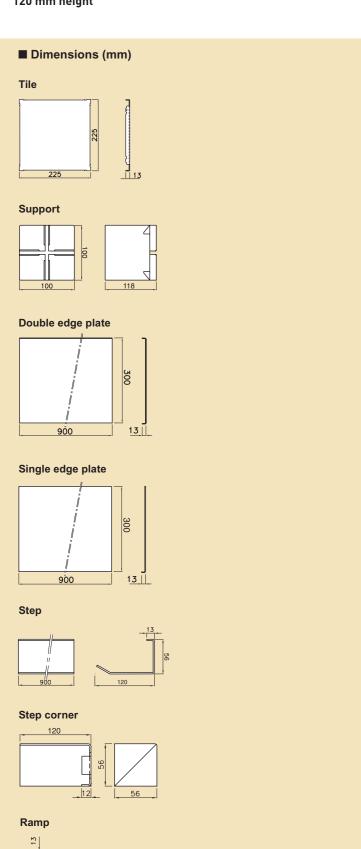
## **G** legrand

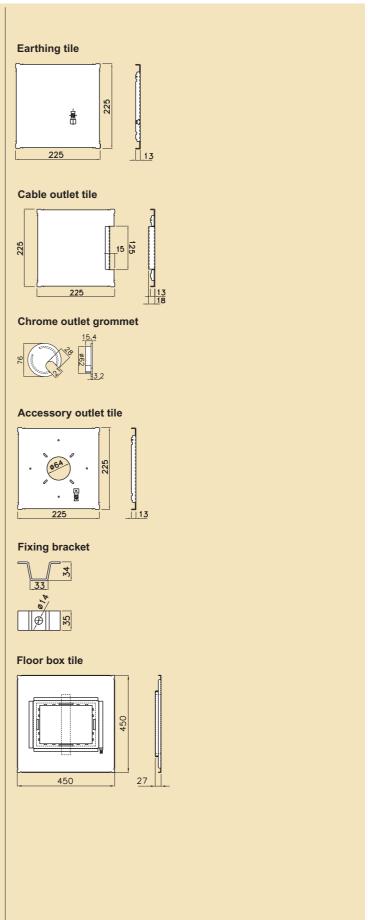
## $\begin{array}{c} \textbf{Soluflex}^{\text{@}} \ \textbf{cable floor system dimensions} \\ \textbf{90 mm height} \end{array}$





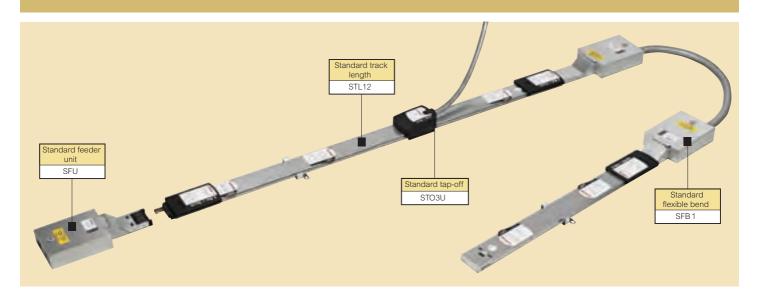
## Soluflex® cable floor system dimensions 120 mm height







#### Arena-Walsall® power track system standard





Dimensions and technical information (p. 34–35)

iwo bar	ana	eartn	63 A	power	track	system

Pack	Cat. Nos.	Track lengths and feeder unit
		Standard track lengths
		Supplied complete with hold down clamps Recommended spacing between two clamps no greater than one metre
1 1 1 1	STL12 STL18 STL24 STL30 STL36	1·2 metres, 4 tap-offs 1·8 metres, 6 tap-offs 2·4 metres, 8 tap-offs 3·0 metres, 10 tap-offs 3·6 metres, 12 tap-offs
		Standard feeder unit
		Supplied with one end cap to be fitted to track end
1	SFU	2 x 20/25 mm knockout entries Terminal capacity 16 mm² maximum  SFU
		Standard tap-offs
		All tap-offs conform to Section 607 of BS 7671: 2001 Supplied with new cable colours to BS 7671: 2001 amendment No. 2 'fixed wiring' These tap-offs can also be used with the dual circuit power track
1 1 1	STO3U STO3F STO5F	3 metres, unfused 3 metres, fused 5 metres, fused

		Standard flexible bend	
1	SFB1	Comprises a length of 25 mm conduit with a plug-in feed at each end, pre-wired with 10 mm² tri-rated cable Cable length = 1 metre Other lengths are available to special order to be used as a bend or an offset	er SFB1
		Standard tee units	
		Supplied with slider and one end cap	
1 1 1	STUA STUB STUC	Left feed Centre feed Right feed	STUB
1	3100	, and the second	
1	SFW	Standard four way Supplied complete with	
ı	OI W	slider and two end caps	SFW
			OI W
		Accessories	
1	SHC	Spare hold down clamp	SHC
		Hanger brackets	112
1 1	SVB SHB	Vertical hanger bracket Horizontal hanger bracket	
		SVB	SHB

Pack Cat. Nos. Flexible bends and tee units

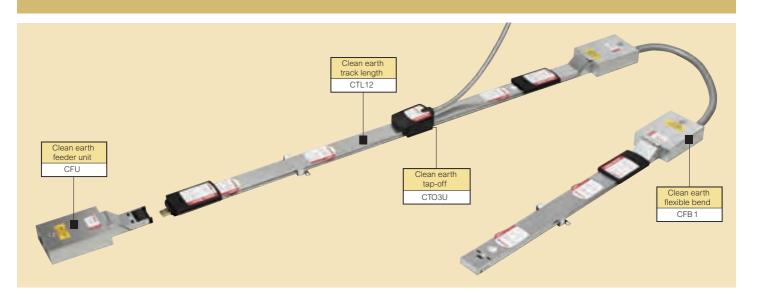
SEC

Spare end cap

Standard power track is denoted by a white label with a black flash



## Arena-Walsall® power track system clean earth





Dimensions and technical information (p. 34–35)

Three bar and earth 63 A power track system including an independant clean earth copper bar

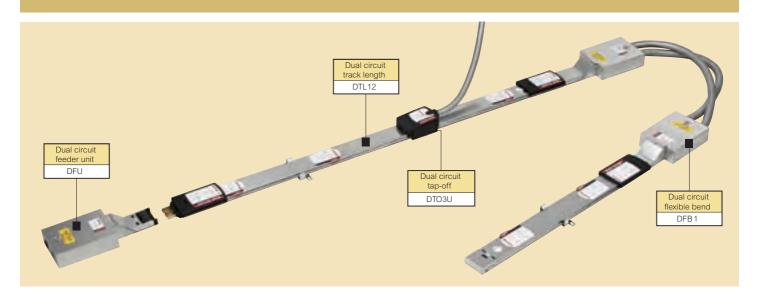
Pack	Cat. Nos.	Track lengths and feeder unit	
		Clean earth track lengths	
		Supplied complete with hold down clamps Recommended spacing between two clamps no greater than one metre	
1 1 1 1	CTL12 CTL18 CTL24 CTL30 CTL36	1·2 metres, 4 tap-offs 1·8 metres, 6 tap-offs 2·4 metres, 8 tap-offs 3·0 metres, 10 tap-offs 3·6 metres, 12 tap-offs	
		Clean earth feeder unit	
		Supplied with one end cap to be fitted to track end	
1	CFU	2 x 20/25 mm knockout entries Terminal capacity 16 mm² maximum  CFU	
		Clean earth tap-offs	
		All tap-offs conform to Section 607 of BS7671: 2001 Supplied with new cable colours to BS 7671: 2001 amendment No. 2 'fixed wiring' These tap-offs can also be used with the dual circuit power track	
1 1 1	CTO3U CTO3F CTO5F	3 metres, unfused 3 metres, fused 5 metres, fused  CTO3U	

Pack	Cat. Nos.	Flexible bends and tee units	
		Clean earth flexible bend	
1	CFB1	Comprises a length of 25 mm conduit with a plug-in feed at each end, pre-wired with 10 mm² tri-rated cable Cable length = 1 metre Other lengths are available to special order Can be used as a bend or an offset	
		Clean earth tee units	
		Supplied with slider and one end cap	
1 1 1	CTUA CTUB CTUC	Left feed Centre feed Right feed	
		Clean earth four way	
1	CFW	Supplied with slider and two end caps	
		CIW	
		Accessories	
1	SHC	Spare hold down clamp	
		Hanger brackets	
1 1	SVB SHB	Vertical hanger bracket Horizontal hanger bracket	
		SVB SHB	
1	SEC	Spare end cap	

Clean earth power track is denoted by a white label with a red flash

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#### Arena-Walsall® power track system dual circuit





Dimensions and technical information (p. 34–35)

Five bar and earth 50 A power track system incorporating both standard and clean earth systems within one enclosure

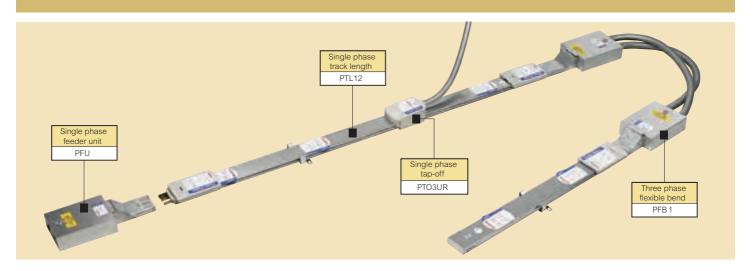
Pack	Cat. Nos.	Track lengths and feeder unit	
		Dual circuit track lengths	
		Supplied complete with hold down clamps Recommended spacing between two clamps no greater than one metre	
1 1 1 1	DTL12 DTL18 DTL24 DTL30 DTL36	1-2 metres, 4 tap-offs 1-8 metres, 6 tap-offs 2-4 metres, 8 tap-offs 3-0 metres, 10 tap-offs 3-6 metres, 12 tap-offs	
		Dual circuit feeder unit	
		Supplied with one end cap to be fitted to track end	
1	DFU	2 x 20/25 mm knockout entries Terminal capacity 16 mm² maximum  DFU	
		Dual circuit tap-offs	
		All tap-offs conform to Section 607 of BS 7671: 2001 Supplied with new cable colours to BS 7671: 2001 amendment No. 2 'fixed wiring' These tap-offs must only be used with the dual circuit power track All tap-offs from standard and clean earth track can also be used	
1 1 1	DTO3U DTO3F DTO5F	3 metres, unfused 3 metres, fused 5 metres, fused DT03U	

Pack	Cat. Nos.	Flexible bends and tee units	
		Dual circuit flexible bend	
1	DFB1	Comprises a length of 25 mm conduit with a plug-in feed at each end, pre-wired with 10 mm² tri-rated cable Cable length = 1 metre Other lengths are available to special order Can be used as a bend or an offset	
		Dual circuit tee units	
		Supplied with slider and one end cap	
1 1 1	DTUA DTUB DTUC	Left feed Centre feed Right feed	
1	DFW	Dual circuit four way Supplied with slider and two end caps	
		Accessories	
1	SHC	Spare hold down clamp	
1 1	SVB SHB	Hanger brackets Vertical hanger bracket Horizontal hanger bracket SVB SHB	
1	SEC	Spare end cap	

Dual circuit power track is denoted by a white label with a black and red flash



## Arena-Walsall® power track system three phase





Dimensions and technical information (see p. 34–35)

Four bar and earth 50 A power track system. Three phased bars, one neutral bar and earth  $\,$ 

Pack	Cat. Nos.	Track lengths and feeder unit	
		Three phase track lengths	
		Supplied complete with hold down clamps Recommended spacing between two clamps no greater than one metre	
1 1 1 1	PTL12 PTL18 PTL24 PTL30 PTL36	1·2 metres, 4 tap-offs 1·8 metres, 6 tap-offs 2·4 metres, 8 tap-offs 3·0 metres, 10 tap-offs 3·6 metres, 12 tap-offs	
		Three phase feeder unit	
		Supplied with one end cap to be fitted to track end	
1	PFU	2 x 20/25mm knockout entries Terminal capacity 16 mm² maximum	

		Tap-offs for three phase power track
		Single phase tap-offs
		All tap-offs conform to Section 607 of BS 7671: 2001 Supplied with new cable colours to BS 7671: 2001 amendment No.2 'fixed wiring' These tap-offs must only be used with the 3 phase power track
1 1 1	PTO3FR	3 metres, unfused reconfigurable 3 metres, fused reconfigurable 5 metres, fused reconfigurable PTO3FR
		Three phase tap-off
		All tap-offs conform to Section 607 of BS7671: 2001 Supplied with new cable colours to BS 7671: 2001 amendment No. 2 'fixed wiring' This tap-off must only be used with the 3 phase power track
1	PTO3U	3 metres, unfused (L1, L2 and L3 connected)

Pack	Cat. Nos.	Flexible bends and tee units	
		Three phase flexible bend	
1	PFB1	Comprises a length of 25 mm conduit with a plug-in feed at each end, pre-wired with 10 mm² tri-rated cable Cable length = 1 metre Other lengths are available to special order Can be used as a bend or an offset	
		Three phase tee units	
		Supplied with slider and one end cap	
1 1 1		Left feed Centre feed Right feed PTUB	
		Three phase four way	
1	PFW	Supplied with slider and two end caps	

		Accessories		
1	SHC	Spare hold down clamp		SHC
1	SVB SHB	Hanger brackets Vertical hanger bracket Horizontal hanger bracket	SVB	SHB
1	SEC	Spare end cap		SEC

Three phase power track is denoted by a white label with a blue flash



#### Arena-Walsall® power track system

technical information

#### ■ Specification / technical data

Electrical data	
Rated current	63 A/50 A
Rated voltage	250 V/415 V
Frequency	50/60 Hz
Rated short circuit withstand	16 kA
Track conductor resistance - line and neutral	3 mΩ/m
Track conductor impedance	1·43 mΩ/m

Volt drops	
Line and neutral : track	2·86 mV/A/m
Tap-off (32 A - 4 mm <sup>2</sup> cable)	10 mV/A/m
Flexible bend (10 mm² tri-rated cable)	3·7 mV/A/m
Feed unit	0·3 mV/A/m
Track connector	0·4 mV/A/m

Earth fault loop	
Impedance : L+N track conductors	1·5 mΩ/m
Earth track conductor	1·2 mΩ/m
Tap-off (32 A - 4 mm <sup>2</sup> cable)	33 mΩ (3 metre L/N/E)
Feed unit	0·3 mΩ
Track connector	0·4 mΩ
Flexible bend (10 mm² tri-rated cable)	3·7 mΩ (1 metre L/N/E)

Mechanical data	
Number of conductors	PE + 2,3,4 and 5
Track conductor cross section area	13 mm²
Incoming cable termination capacity	16 mm <sup>2</sup>
Tap-off cable 32 A unfused	4 mm <sup>2</sup>
Tap-off cable 13 A fused	L/N: 2·5 mm², E: 4 mm²
Tap-off conduit	16 mm/20 mm diameter
Feeder conduit entry	20 mm/25 mm diameter
IP rating	IP 40 (when fully assembled)
Maximum profile height	47 mm including tap-off
Track height	17 mm

Material specification	
Track housing	Galvanised steel
Track conductors	High conductivity copper
Track insulator	Self extinguishing PVC extrusion
Sockets, track connectors, track ends	Nylon
Tap-off plugs	Nylon
End shutters and track shutters	Glass filled nylon
Tap-off / flexible bend cable	LSF/PVC
Tap-off / feeder and connector pins	Brass

#### **■** Technical information

#### Certification

Asta Certified and tested to BS EN 60439-1 : 1999 and BS EN 60439-2 : 2000

Manufactured within a ASTA BEAB approved ISO 9001:2000 facility



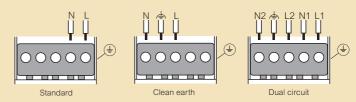
#### **IEE Wiring regulations**

Legrand fully complies with BS 7671: 2001

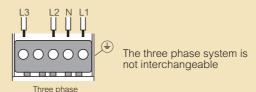
#### **Section 607 requirements**

All items comply with the relevant paragraphs of Section 607 of BS 7671 : 2001

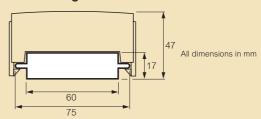
#### ■ Terminal block connections



The three types above are compatible and an installation can be downrated from the dual circuit to either standard or clean earth in mid-run by means of a flexible bend or direct connection



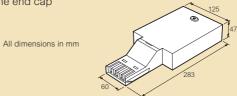
#### ■ Track length



Overall height: 47 mm with feeder unit and tap-off

#### **■** Feeder units

Two – 20/25 mm knockout entries
Terminal capacity 16 mm² maximum
Supplied complete with terminal block, lid and turnbuckle fastener and one end cap



#### **■** Tap-offs

Section 473-02-02 of the Wiring Regulations require any conductor exceeding 3 m in length to have a fault current protective device (e.g. fuse) at the point where current carrying capacity is reduced (tap-off plug)

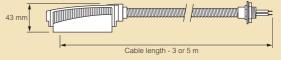
All tap-offs over 3 m will be supplied with a BS1362 13 A fuse fitted

within the plug

If the system is to be protected by a 32 A breaker then unfused tap-offs exceeding 3 m may be specified at time of order

Other pre-wired tap-off lengths are available on request

Unfused tap-offs are rated at 32 A Fused tap-offs are supplied with a standard BS1362 13 A fuse

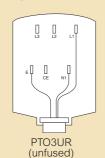


Tap-off length refers to the cable and not the conduit length The conduit is 250 mm shorter than the cable length

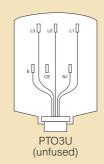


#### ■ Tap-offs for three phase power track

#### Single phase tap-offs



#### Three phase tap-off



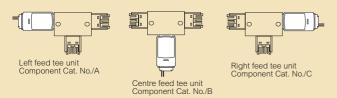
### ■ Tees and four ways

PTO3FR/PTO5FR

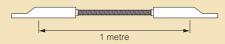
(fused)

F

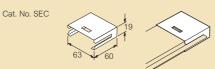
Supplied complete with slider, lid, turnbuckle fasteners and end cap(s)



#### **■** Flexible bends



#### ■ End cap



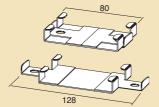
All dimensions in mm

#### ■ Hold down clamp

Each power track length is supplied

- already fitted with sliding clamps.
   2 clamps on each 1·2, 1·8 and 2·4 metre length
- 3 clamps on each 3.0 and 3.6 metre length

All dimensions in mm

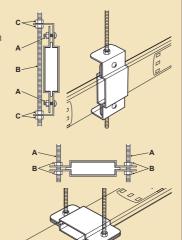


#### ■ Vertical hanger bracket

Supplied in two parts complete with clamping screws (A) Use one M8 threaded rod (B) and four M8 nuts (C) (one above and below each bracket flange) Recommended spacing between vertical hanger brackets is 1 metre

#### ■ Horizontal hanger bracket

Supplied in two parts Use two M8 threaded rods (A) and four M8 nuts (B) (one above and below each bracket flange) Recommended spacing between horizontal hanger brackets is 1 metre maximum



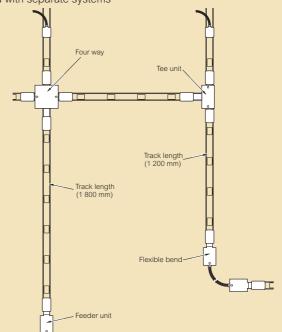
#### ■ Typical Layout

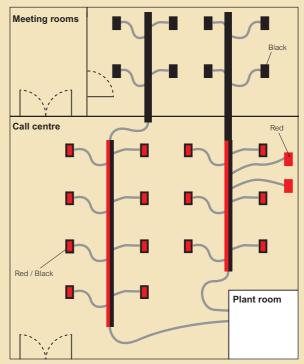
The example opposite shows a typical layout consisting of numerous service outlet boxes with both standard and clean earth sockets in the call centre, two boxes with just clean earth sockets (fax, photocopier, etc)

and boxes with standard sockets in the meeting rooms.

Boxes with both standard and clean earth sockets can be fed with a dual circuit tap-off into a dual circuit track. The two clean earth boxes can be fed from the dual circuit track with just a clean earth tap-off

The system can then be downgraded by connecting standard track on to the dual circuit track by means of a flexible bend or direct connection. The continuing circuit is then restricted to a standard two bar and earth. This will save the contractor time and money by eliminating the need for extra cable and feeder units that would be required with separate systems





- 3 compartment service outlet box complete with 1 standard twin socket and 1 clean earth red twin socket.
- 3 compartment service outlet box complete with 2 clean earth red twin sockets.
- 3 compartment service outlet box complete with 2 standard twin





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