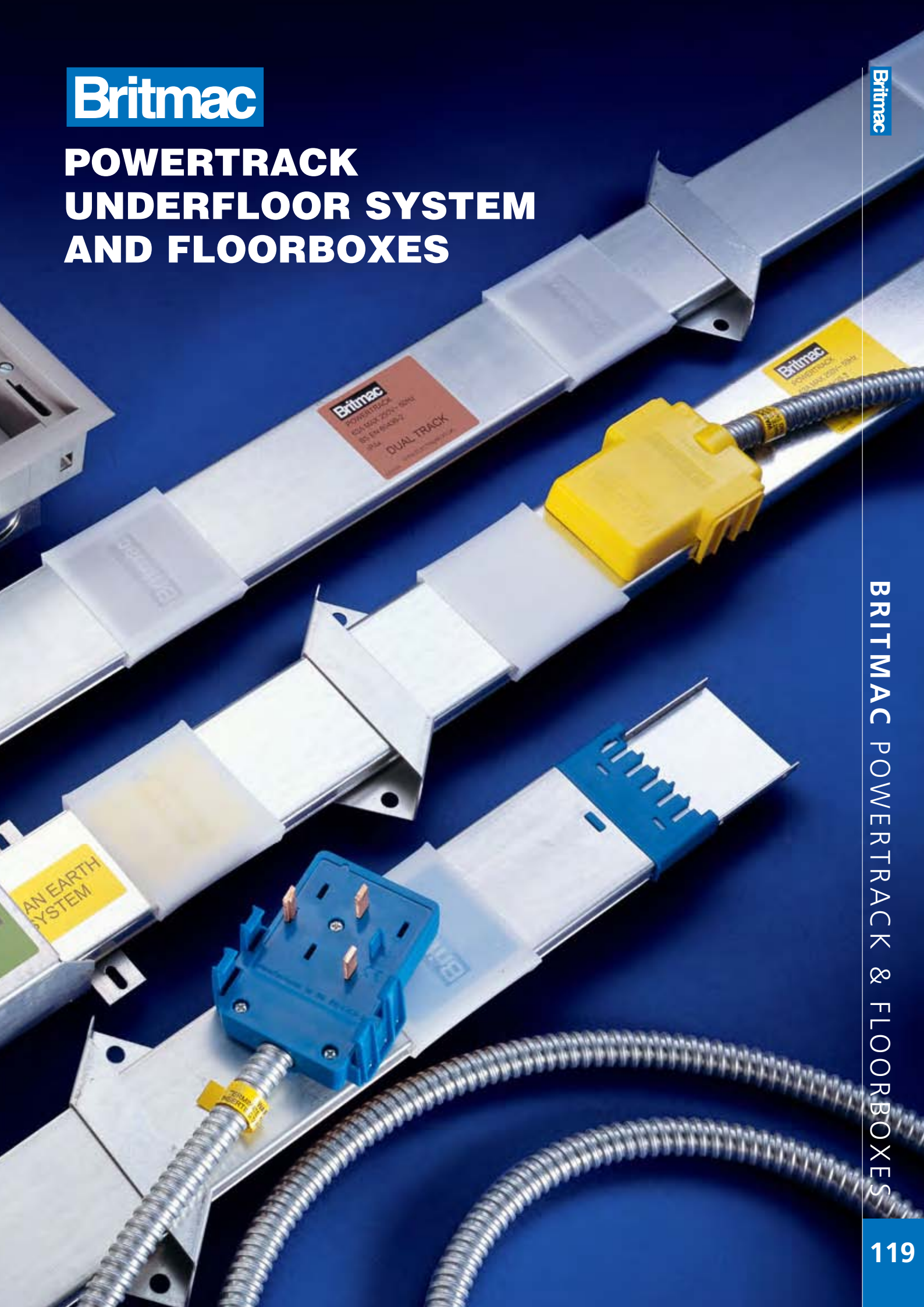
Britmac

POWERTRACK UNDERFLOOR SYSTEM AND FLOORBOXES



Britmac

POWER TRACK UNDERFLOOR SYSTEM

The Britmac underfloor power track system has undergone some radical changes to meet the ever increasing power requirements of the workplace. The system consists of a series of fully enclosed single phase busbar module units and is designed to be assembled directly onto the floor slab of a cavity floor installation using the integral floor fixing brackets. The track modules have a simple and quick push fit connection allowing for rapid on site assembly. The modules are available as standard 2P+E, Clean Earth 2P+E+CE and dual system 4P+E+CE. The system has been designed with minimal parts to assist the contractor fitting out on site.

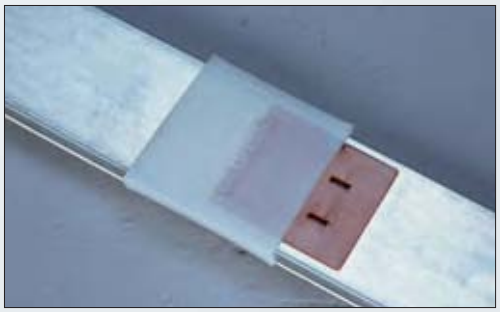
- Direct to floor assembly
- Universal cable feeder unit
- Standard Earth 2P+E - Blue
- Clean Earth 2P+E+CE - Yellow
- Dual system 4P+E+CE - Brown

The Power track module is a 63A single phase busbar unit with the facility to accept a tap-off unit every 300mm, this allows the removal or addition of tap off units without the need to isolate the complete system. The system has been designed with the electrical contractor in mind, where speed and ease of installation are paramount, with push fit connectors on both the track connections and feed units. There is a keying system on the track end which operates the shutter mechanism and allows correct location.

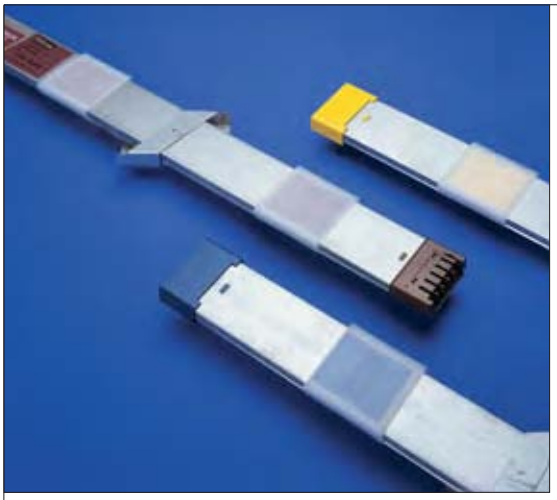
The modules come in standard lengths, all compatible with standard floor modules and cavity floor trunking sizes. Each length comes complete with an innovative method of track fixing. The fixing bracket simply swivels out to enable solid fixing to the floor screed.

The standard tap off units comprises a 32A unfused plug fitted with flexible metal conduit. Where lengths longer than 3m are required, a fused tap off unit is fitted and wired with the appropriate length of cable. All tap offs have a keying system which ensures that the correct tap off is fitted

Transparent dust covers are provided to enable easy recognition of the system installed. The dust cover slides along the track length to enable tap off plug insertion.



- Push fit
- Colour coded
- 50mm minimum clearance height
- Non interchangeable pin configuration
- Pre-wired tap off unit
- Complies with BS 7671: 2008 regulation 543.7



UNDERFLOOR POWER TRACK MODULES

Track Length	Standard	Clean Earth	Dual Track
1200mm	**UPT12**	**UPT12TE**	**UPT12DE**
2400mm	**UPT24**	**UPT24TE**	**UPT24DE**
3600mm	**UPT36**	**UPT36TE**	**UPT36DE**

- Tap off socket at 300mm intervals complete with clear dust cover
- Track fixing brackets factory fitted 2 on 1.2m, 3 on 2.4m and 3 on 3.6m
- Each length comes with a shuttered interconnection and a track stop end
- Colour Coded: Blue - Standard
  Yellow - Clean Earth
  Brown - Dual Track

UPFLH

CABLE SUPPLY FEED IN

Feed unit for standard & clean Earth system	**UPFLH**
Feed unit for Dual Track system	**UPFLH/DE**

CABLE SUPPLY FEED ON

Universal feed unit	**UPFRH**

- The Cable Supply feed end allows the termination of the incoming flexible cables. The generously sized terminals accept up to 16mm^2 cables
- 1 x 25mm diameter conduit entry hole
- Feed unit for Dual Track system has 2 x 25mm diameter conduit entry holes

UPFCTE

FLEXIBLE CORNER UNIT

	Standard	Clean Earth	Dual Track
1 Metre Length	**UPFC**	**UPFCTE**	**UPFCDE**

- Comes complete with feed in and feed on units
- The flexible corner unit is used for angled bends or to pass around or over an obstruction. The unit comprises a 1 metre length of 25mm flexible metal conduit and the appropriate 10mm^2 LSF cable

UPP3TE

32A TAP OFF UNIT

	Standard	Clean Earth	Dual Track
3M Unfused	**UPP3**	**UPP3TE**	**UPP3DE**
5M 13A Fused	**UPP5F**	**UPP5FTE**	**UPP5FDE**

- 3.0m Unfused tap off wired with 4mm^2 LSF cable housed in a 16mm diameter flexible metal conduit
- 5.0m Fused tap offs incorporate a 13A Fuse and are wired with 2.5mm^2 LSF cable to Live and Neutral with the Earth wired using 4mm^2 LSF to comply with regulation 543.7
- Tap off incorporates a keying system which ensures correct insertion is always achieved

Conditional Short Circuit Rating

TRACK

Short circuit protection provided by fuselinks BS-88 and BS 1361 100 amp maximum.

Prospective current	16.5kA
Mechanical withstand	10kA peak
Thermal withstand	1200A for 0.1 seconds

TAP-OFF UNITS

Mechanical withstand	10kA peak
Thermal withstand	1200A for 0.1 seconds

Earth Fault Loop Impedance (measured at 1.0A)

The IEE Wiring Regulations require accurate determination of the total earth loop impedance, which must be low enough to ensure that the protective device will operate within the specified time, which for circuits incorporating socket outlets is 0.4 seconds. The values for the Britmac System for calculating the earth fault loop impedance are as follows:

Phase busbar	1.97mV/m
Earth busbar to housing	1.38mV/m
Earth busbar (Clean Earth)	1.97mV/m
Track connector	0.37mV
Supply connector	0.24mV
32A tap-off (4mm² x 3m), line	9.92mV

Volt Drop, Combined Phase & Neutral (measured at 1.0A)

Busbar (line & neutral)	3.94mV/A/m
Track connector	0.74mV/A
Supply connector	0.48mV/A
32A tap-off (4mm² x 3m), line & earth	19.84mV/A/m

Cable Capacity of Terminals

Supply connector 16mm² csa stranded conductor

Construction

TRACK

Body extrusion	Galvanised Steel
Track base	Galvanised steel
Busbar	High conductivity copper
Degree of protection	Track IP4X; In-feed housing IP3X C

TAP-OFF UNITS

Standard, Clean Earth and Dual Track tap-offs are non-interchangeable. All types available in fused and unfused versions.

32A tap-off unit

The 32A tap-off is unfused with 3 metres of 16mm diameter flexible conduit and 4mm² cables to BS 6004:2000 which are terminated in the tap-off via welded connections.

Fused tap-off unit

Required where conduit lengths greater than 3 metres are used. The tap-off unit is used as standard at 13 amps and is fitted to the specified length of 16mm diameter conduit and 2.5mm² cables to BS 6004:1995 which are terminated in the tap-off via welded connections. The flexible conduit is manufactured to BS EN 50086-1

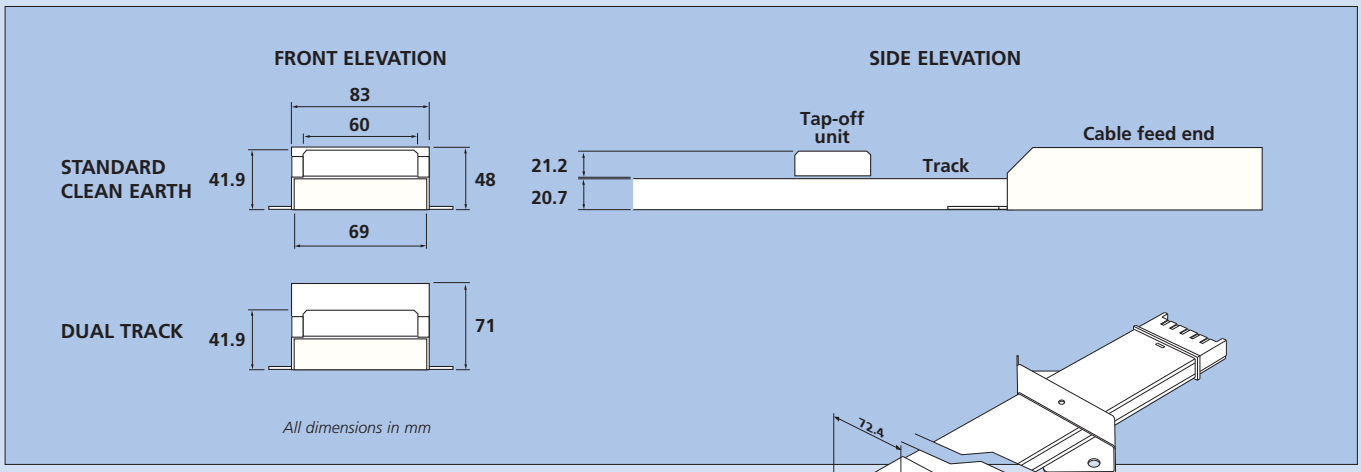
STANDARDS

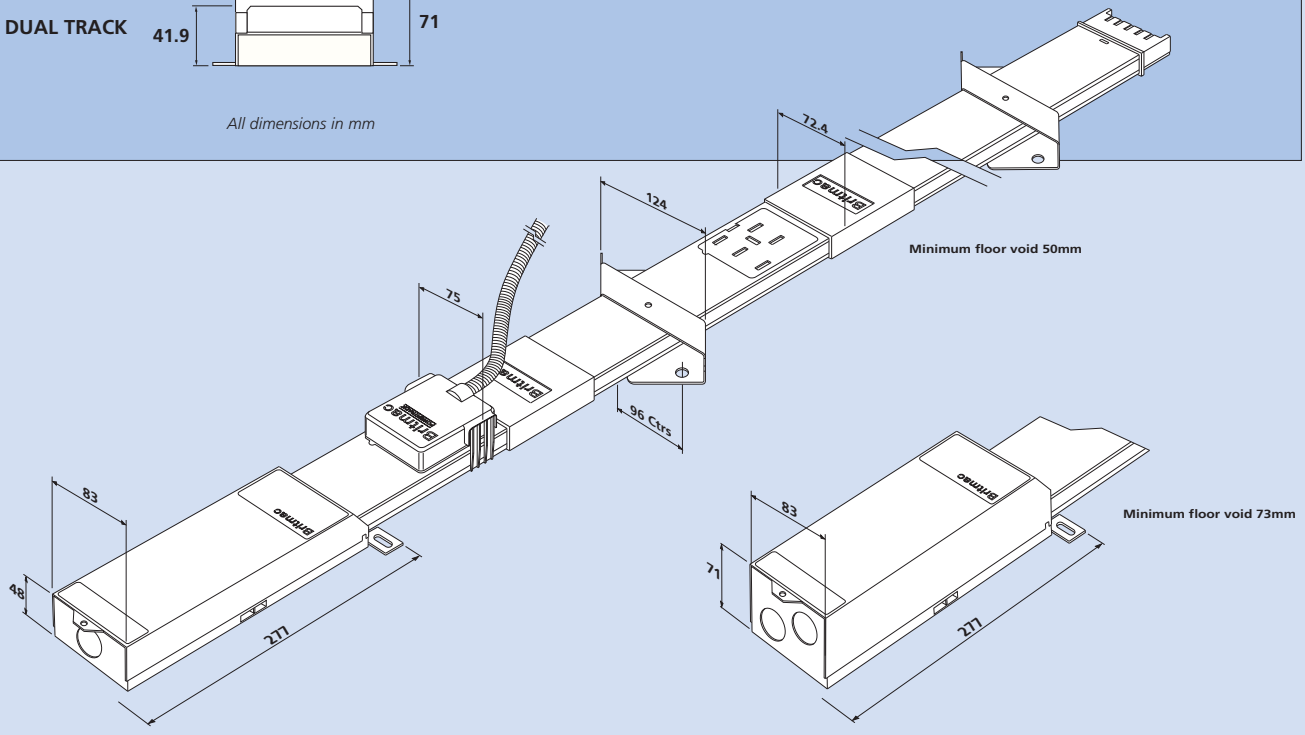
BSEN 60439: Part 1 & Part 2.

The track system enables compliance with the latest IEE Wiring Regulations, BS 7671:2008.

TRACK CURRENT RATING

63 amps, 240V ac; 50Hz single phase ambient temperature 25C.





FLOOR BOX DISTRIBUTION

The Britmac range of cable management products have been utilised in the design and installation of electrical systems in commercial and industrial projects for many years. The comprehensive fast-fit floor box provides a wide choice from which to select the most appropriate for a specific application. Units can be supplied fitted with accessories pre-wired to customers' requirements and fully factory tested in the UK prior to delivery. The products are supported by a nationwide team of Sales Engineers and Stockists.

- Large capacity cable routing guides ensure cables exit the box safely and neatly
- Lid hinge design ensures that lid will always self-close
- Snap-out facility enables the lid to be removed for access to accessory plates
- Pre-wired saving time during site installation

GR03G

3 COMPARTMENT FLOOR BOX & ACCESSORIES

TRIM COLOUR	LIST No
Grey	**GR03G**

- The most popular size of raised access floor box for use in commercial office applications where power, voice and data services are required.
- Utilises 87mm wide accessory plates.

For Floor Box Dimensions See page 129.

GB3SRCD30/BG GB3SSN2/BG

SWITCHED 13A SOCKETS

	LIST No
13A 2 Gang switched socket TWIN EARTH	**GB3SS2/BG**
13A 2 Gang switched socket CLEAN EARTH	**GB3SS2CE/BG**
13A 2 Gang switched socket NON-STD TWIN EARTH	**GB3SSN2/BG**
13A 2 Gang switched socket NON-STD CLEAN EARTH	**GB3SSN2CE/BG**
13A 2 Gang switched safety socket 30mA	**GB3SRCD30/BG**

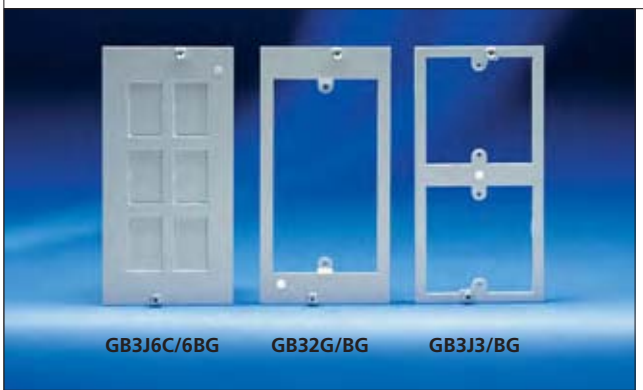
- Clean Earth has a normal and an isolated earth.

GB3S2/BG GB3SN2/BG

UNSWITCHED 13A SOCKETS

	LIST No
13A 2 Gang unswitched socket TWIN EARTH	**GB3S2/BG**
13A 2 Gang unswitched socket CLEAN EARTH	**GB3S2CE/BG**
13A 2 Gang unswitched socket NON-STD	**GB3SN2/BG**

- Clean Earth has a normal and an isolated earth.


GB3J6C/6BG GB32G/BG GB3J3/BG

GB3ALPHA/BG GB3EURO/BG

DATA AND COMMUNICATIONS

	LIST No
Accessory plate 4 knockout LJU6C/RJ45	**GB3J6C/BG**
Accessory plate to accept 6x LJU6C/RJ45	**GB3J6C/6BG**
Accessory plate to accept 2x 1G standard accessory	**GB3J3/BG**
Accessory plate to accept 2G standard accessory	**GB32G/BG**
Blank plate	**GB3BP/BG**
Accessory plate to accept 4x Alpha	**GB3ALPHA/BG**
Accessory plate to accept 2x Euro module (Will accept 4x Crabtree communication modules 25mm x 50mm).	**GB3EURO/BG**

- All plates 87mm x 173mm.
- All accessory plates are supplied with fixing screws.

GR04G

4 COMPARTMENT FLOOR BOX & ACCESORIES

TRIM COLOUR	LIST No
Grey	**GR04G**

- Compact 4 compartment unit - utilises 66mm wide accessories.
- 4 compartment units can provide an attractive and economical solution for applications, where power, voice and data systems are to be accessed, particularly where both clean and utility power outlets are required or where more than one type of data system is required.

For Floor Box Dimensions See pages 128 & 129.

GBSS2/BG GBSSN2/BG

SWITCHED 13A SOCKETS

	LIST No
13A 2 Gang switched socket TWIN EARTH	**GBSS2/BG**
13A 2 Gang switched socket CLEAN EARTH	**GBSS2CE/BG**
13A 2 Gang switched socket NON-STD TWIN EARTH	**GBSSN2/BG**
13A 2 Gang switched socket NON-STD CLEAN EARTH	**GBSSN2CE/BG**

- Power sockets supplied with rear entry terminals as standard.
- Clean earth have a normal and an isolated earth.
- Only two 13A 2 gang Sockets can be fitted per Floor Box, in centre compartment only.

GBJ6C/BG GBBP/BG

GBEURO/BG GBALPHA/BG

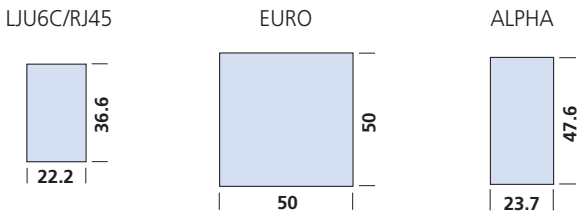
DATA AND COMMUNICATIONS

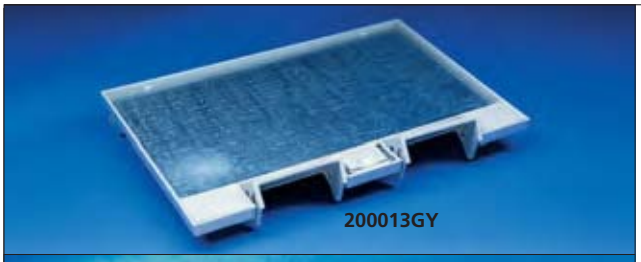
	LIST No
Plate to accept 4 LJU6C voice or 4 RJ45 data outlets	**GBJ6C/BG**
Blank plate for on-site piercing	**GBBP/BG**
Plate to accept 4x Alpha	**GBALPHA/BG**
Plate to accept 2x Euro modules (Will accept 4x Crabtree communication modules 25mm x 50mm).	**GBEURO/BG**

- All plates 66mm x 173mm.
- All accessory plates are supplied with fixing screws.

13A accessory plates are supplied with the appropriate interior fitted.

KNOCKOUT DIMENSIONS





CURRENT RANGE

GROSVENOR LID REPLACEMENT 3 & 4 GANG

Lid assembly, Grey	**200013GY**

GROSVENOR SPARES

Trim piece (plain), Grey	**98950-1/A/2**
Trim piece (handle), Grey - Complete	**98347-1/A/2**
Cable flap, Grey	**98351-1/H/1**
Cable retainer, Black	**98496-2/E/1**

FLOOR GROMMET

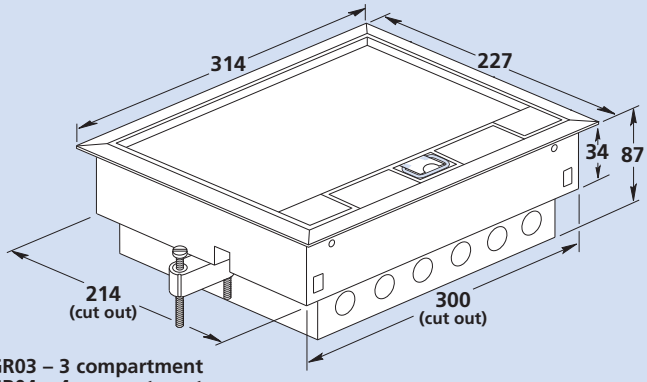
In the modern office environment where flexibility is vital, the BRITACCESS floor grommet can accommodate most requirements for accessing cables on flexible conduits up to cable managed desks etc.

If the requirement is for a basic access point the top element will satisfy that need. To allow a desk module to pass through from a floor void whether it be a 3 core flexible cable or a flexible conduit, the BRITACCESS grommet is suitable for the job.

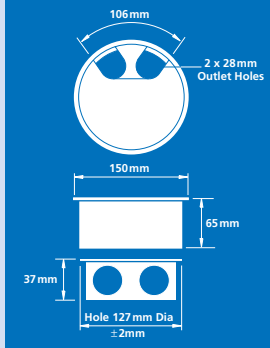
FLOOR ACCESS GROMMET

Top Grommet Only	**BAG150**
Floor Grommet c/w Switched 1G Socket & Back box	**BAGSS**

GROSVENOR 'FAST FIT' RAISED ACCESS FLOOR BOXES



GR03 – 3 compartment
GR04 – 4 compartment



SPECIFICATION

Top Element (Grommet Only)

Dimensions:

O/A Diameter	150mm
Internal Diameter	120mm
Depth	65mm
Material:	High Impact ABS
Colour:	RAL 7016

BRITMAC FLOOR DISTRIBUTION SYSTEMS

Materials

All systems are constructed from high quality materials and are designed to meet relevant British and International Standards including the installation requirements of the IEE Wiring Regulations.

Raised Access Floors

Throughout this catalogue the term Raised Access Floor has been used to describe any modular flooring system which is supported on adjustable pedestals providing a service void. Other names frequently used are Cavity Floor, False Floor, Platform Floor, Access Floor, Computer Floor, etc.

GROSVENOR RAISED ACCESS FLOOR BOXES

Floorboxes

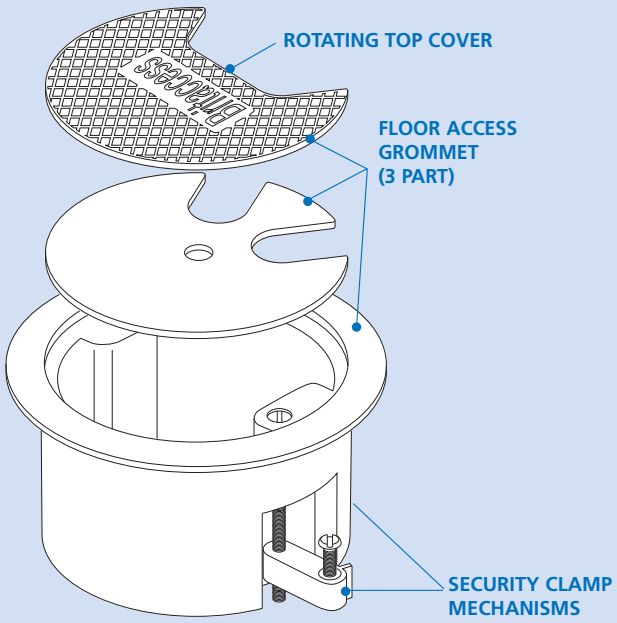
The Grosvenor floorbox has been designed to withstand working loads of the PSA MOB PF2 PS/SPU specification for raised floors.
The floorboxes listed within this catalogue are capable of accepting a very wide range of accessories fitted in any compartment. However, certain combinations do impose restrictions on positioning, due to the clashes of connectors, plug tops or the cables themselves.

Accessories

All accessory plates are supplied complete with the appropriate thread cutting screws. Each fixing hole in the unit frames is unthreaded and deep plunged for ease of location of fixing.
The minimum plug clearance between accessory plate and underside of floor is 34mm.

POWER (13A)
Twin Earth sockets.
Non-standard sockets.
Clean Earth sockets.

TELEPHONE
Components for most British Telecom, Mercury and other national and international systems.

DATA
A wide range of components to suit virtually all systems in current use. These include IBM, Wang, Phillips, ICL and many others.

All dimensions in mm Tolerance on cut-out dimensions is ±1mm