MK

Ega

Raised Floor Trunking Systems

Building Solutions For the Future

Contents

Specifier's Guide

General

The multi-way EGA raised floor trunking system is designed to cater for the need of cable mangement in raised access floor. It provides a solution for distributing power, telecommunications and data services to users by way of floor outlet boxes. The distribution of telephone, power and computer services within raised floor shall be provided according to the layouts as shown on the specification drawings. For protection against corrosion the trunking system shall be coated with minimum 45 micron thickness of electrostatic oven baked, epoxy powder paint.

The interior of the components shall be free from sharp projections and be formed with intersections, bends, junctions and vertical access boxes that permit cables to be laid or drawn in without damages.

The trunkings, junction boxes with flyover units (for double and triple compartment only), vertical access boxes, trunking support brackets and service outlet boxes shall be proprietary made similar to "EGA Raised Floor Trunking System" manufactured by MK Electric according to the enclosed schedule.

The 230 volts or 110 volts power cables for socket outlets should not be laid into the same compartment of the trunking for the telephone or the computer services.

Flyover (cross-over bridges) shall be provided in the intersections boxes with metal partitions through the trunkings to ensure adequate segregation for the three services.

Components shall be effectively earth bonded to one another by mechanical means utilising special earth bonding devices where required.

Planning & layout

Planning

In the planning of the Raised Floor Trunking System layout, it is essential to establish the following information and requirement:

Introduction of trunking must begin at the distribution board of the floor concerned;

Determine the services, the capacity of the trunking and the junction boxes to be laid;

Trunking should be laid on the level of the structural slab;

For the raised floor trunking system, the extent to which a service outlet box can be equipped with facilities is determined by its dimensions. Our standard service outlet modular units are designed to meet the requirement of a normal workplace;

Our recessed service outlet covers can withstand the usual wear and tear from chairs fitted with castors.

Layout

Depending on the desired flexibility, the ducting system is usually laid out on a grid, fishbone or comb pattern with double or triple compartment runs;
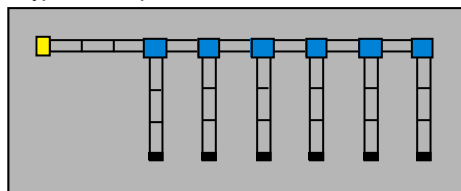
A grid pattern is recommended if the user requires a wide degree of flexibility. In any reorganisation of user's work areas, the grid patterned trunkings provide multiple options for cabling requirements;
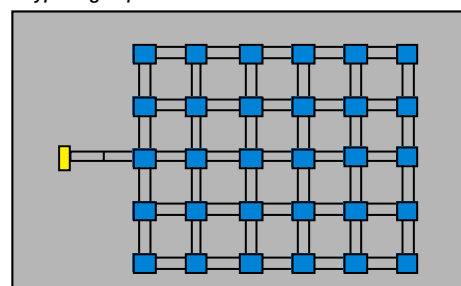
A fishbone pattern is ideal for medium sized areas where less boxes are required;

A comb pattern is most economical wherein less trunking is used.
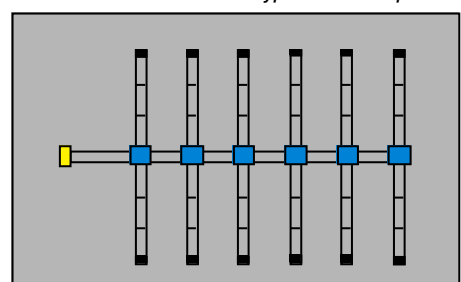

A typical comb pattern

- ▯ **Vertical Access Box**
- ▮ **Cross Junction Box**
- ▬ **End Cap**
- ═ **Trunking**

A typical grid pattern

A typical fishbone pattern

Raised Floor Trunking System

EGA Raised Floor Trunking are fabricated to BS4678 Pt1: 1973

Material: 1mm - 1.6mm thick pregalvanized steel sheet to BS2989: 1982 without epoxy powder coating.
OR
1mm - 1.6mm thick cold-rolled or electrogalvanised (EG) steel sheet with oven baked epoxy powder coating.

Standard length   : Covers - 1200mm (2 Nos per trunking)
                       Base - 2440mm
Standard depth   : 38mm. Other width and depth sizes are also available

List No.	Trunking Size	Compartment Size		
		1st mm	2nd mm	3rd mm
RMT 150/2	150 x 38mm 2 Compartments	75	75	-
RMT 200/2	200 x 38mm 2 Compartments	100	100	-
RMT 300/2	200 x 38mm 2 Compartments	150	150	-
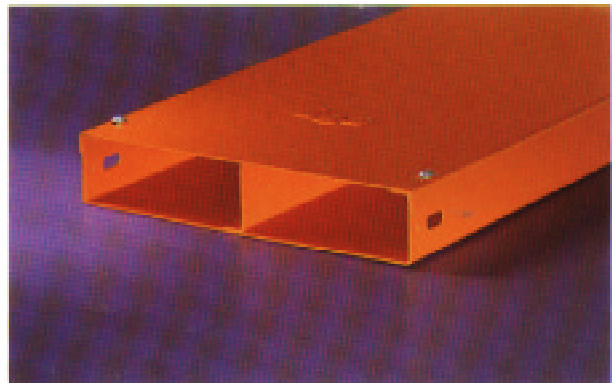
List No.	Trunking Size	Compartment Size		
		1st mm	2nd mm	3rd mm
RMT 225/3	225 x 38mm 3 Compartments	75	75	75
RMT 300/3	300 x 38mm 3 Compartments	100	100	100
RMT 450/3	450 x 38mm 3 Compartments	150	150	150
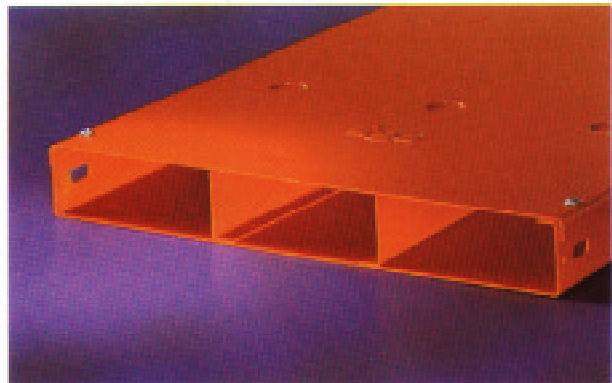
Vertical Access Box

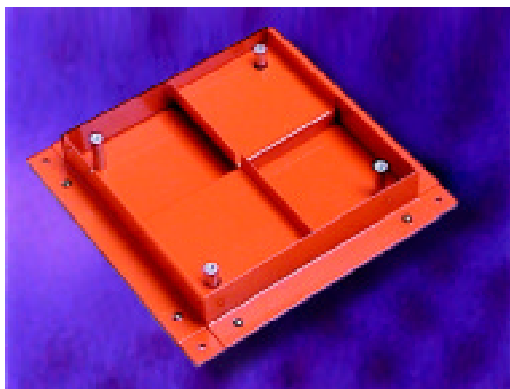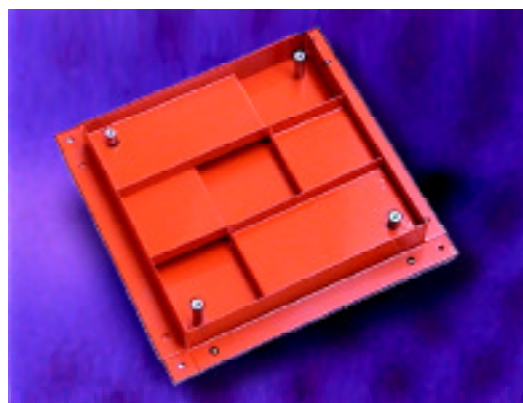| List No.		Description
RVB 150/2	150 x 200 x 50mm	2 Compartments
RVB 225/3	225 x 200 x 50mm	3 Compartments
RVB 200/2	200 x 200 x 50mm	2 Compartments
RVB 300/3	300 x 200 x 50mm	3 Compartments
RVB 300/2	300 x 200 x 50mm	2 Compartments
RVB 450/3	450 x 200 x 50mm	3 Compartments
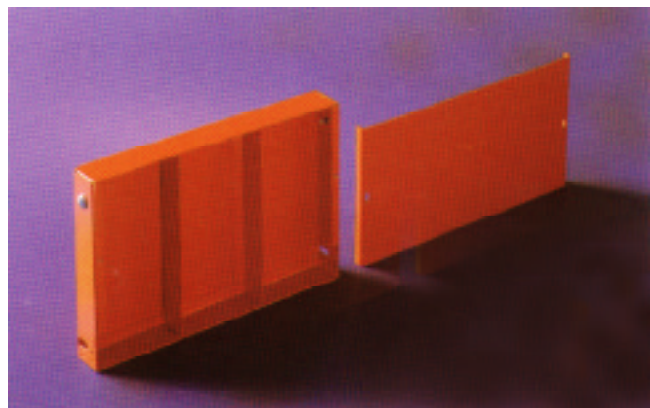
Junction Box

4-Way Junction Box

Double Compartment

List No.	Trunking Size	Compartment Size	
		1st mm	2nd mm
RMJ 150/2C	150 x 38mm	75	75
RMJ 200/2C	200 x 38mm	100	100
RMJ 300/2C	300 x 38mm	150	150

Triple Compartment

List No.	Trunking Size	Compartment Size		
		1st mm	2nd mm	3rd mm
RMJ 225/3C	225 x 38mm	75	75	75
RMJ 300/3C	300 x 38mm	100	100	100
RMJ 450/3C	450 x 38mm	150	150	150

Accessories

End Cap

List No.	Description
REC 150	End cap for 150 x 38mm trunking
REC 225	End cap for 225 x 38mm trunking
REC 100	End cap for 100 x 38mm trunking
REC 200	End cap for 200 x 38mm trunking
REC 300	End cap for 300 x 38mm trunking
REC 450	End cap for 450 x 38mm trunking
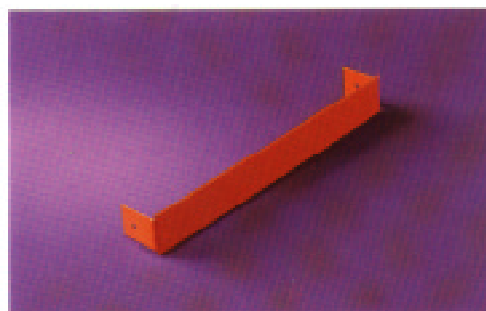
Trunking Support Bracket (Adjustable type)

List No.	Description
RTB 100A	For 100mm trunking
RTB 150A	For 150mm trunking
RTB 200A	For 200mm trunking
RTB 225A	For 225mm trunking
RTB 300A	For 300mm trunking
RTB 450A	For 450mm trunking

Trunking Support Bracket (Fixed Height)

List No.	Description
RTB 100F	For 100mm trunking
RTB 150F	For 150mm trunking
RTB 200F	For 200mm trunking
RTB 225F	For 225mm trunking
RTB 300F	For 300mm trunking
RTB 450F	For 450mm trunking

MK Raised Floor Outlet Box

The MK raised floor outlet box incorporates many innovative features designed to speed up installation and provide the client with a safe and easy-to-use product.

Raised floor outlet boxes are normally secured within panels which can be located anywhere within an access floor.

Individual accessories plates are interchangeable, allowing any combination to be prepared. Blank plates are available for use where the precise requirements are unknown or future requirements cannot be determined in advance. They ensure that all boxes are complete when fitted.

The floor outlet boxes are supplied complete with texture, *easy-to-clean frame and lid* available in light grey colour.

The *'snap-in' lid*, incorporating a steel reinforcing plate, is reversible and readily detaches from the frame when accidentally kicked or knocked. The top is recessed to accommodate up to 7mm thickness of carpet or a similar floor finish.

Access to the interior is by the use of a flush fitting handle.

Cables are guided by *cable retainers* through generous *cable outlet* which open automatically and lock into position when cables are present. Detachable cable retainers are mounted on the side of the frame to guide cables safely through the outlets in the lid.

The frame, which is also reversible, incorporates a *unique ratchet system* and is designed to be self-adjusting to any normal floor finish thickness. The frame is secured by hand operated ratchet bars which provide for quick and efficient installation and removal without the need for tools.

To remove the carpet frame, the ratchet bars on the opposite sides of the frame are pulled towards the centre of the box, releasing the pressure and allowing the frame to be lifted clear.
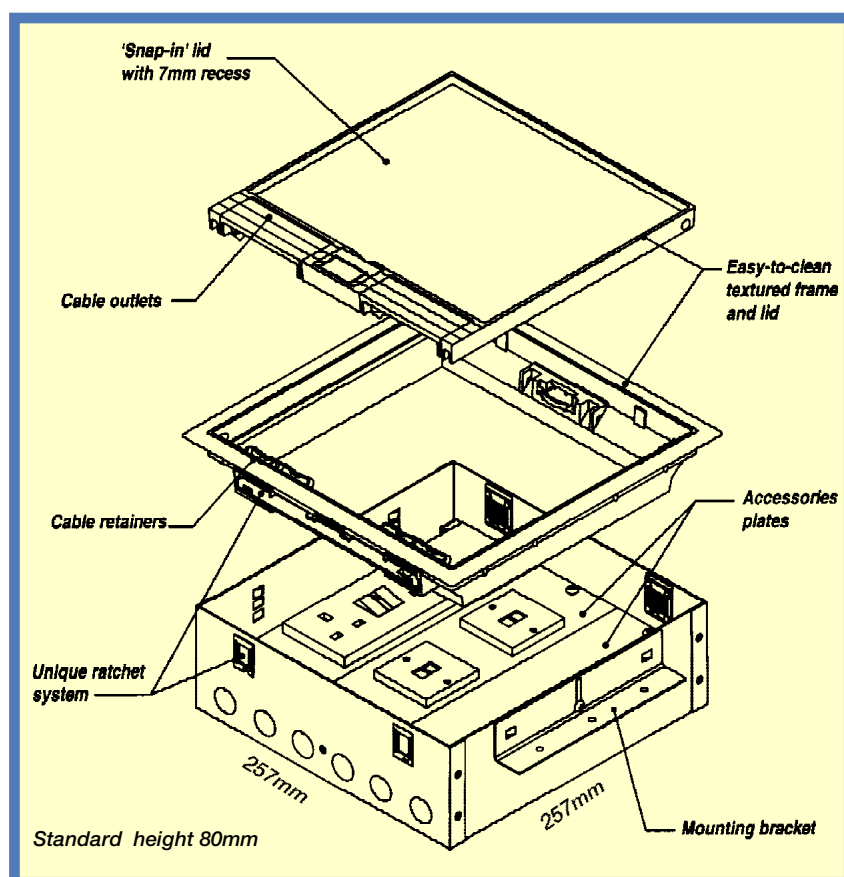
The *accessories plates* within the floor outlet box can be withdrawn from above by removing two screws, without first having to remove the floor outlet box. A wide range of power, telecommunication and data accessory plates are available.

The floor outlet boxes are supplied with an adjustable *mounting bracket* fixed to each of the two short sides. This is designed to allow the floor outlet box to be fixed from above or below the access floor panel. The minimal thickness of the bracket allows it to be concealed by the floor finish when mounted from above.

The MK floor outlet box is designed for use in any access floor system or for installation where the necessary clear void space is available.

A minimum depth of 100mm is normally recommended from the top of the access floor panel to the top of the structural slab.

NB The size of cutout for access floor panel is *258 x 258 (mm)*

'Snap-in' lid with 7mm recess

Cable outlets

Cable retainers

Unique ratchet system

257mm

257mm

Easy-to-clean textured frame and lid

Accessories plates

Mounting bracket

Standard height 80mm

Standard and Approval

The trunking system complies with the relevant specification, i.e. BS4678, SS249 and IEC61084. The electrical accessories comply with the relevant requirements of BS1363, BS5733, SS145 and SS241. If required, Declaration of Compliance according to IEC/ISO Guide 22 can be provided.

In addition, MK floor outlet boxes passed a stringent load test.

Technical Specification

Material:
ABS, Polyamide and Galvanised Steel.

Strength:
The floor outlet boxes are capable of resisting minor accidental loading only when rigidly supported under the outer rim of the cover frame. They are not intended for use in areas subject to access floor design loads. Specific details are available on request.

Fire:
The outer casing of the floor outlet box is manufactured from metal and is non-combustible.

Chemical resistance:
Non-corrosive

Water absorption:
The floor outlet boxes are for use in situations where the cleaning method used does not result in the formation of pools of liquid or soaking of the floor surface.

Degree of protection:
Enclosure classification IP20, when installed in accordance with the instructions set out in the Installation Guide.

Ambient temperature range:

	Min	Max
Handling and storage	**-5^{0}C**	**60^{0}C**
During installation	**-5^{0}C**	**60^{0}C**
Operating	**-5^{0}C**	**40^{0}C**

(Average not to exceed 35^{0}C in any 24 hour period)

Installation

The Floor Outlet Boxes are designed to be located within the depth of the access floor. Whilst the number and location of the boxes will depend on the user's requirements, as general guide, the minimum recommended distribution is one floor box for every 10m^2.

Normally it is desirable not to have an outlet further than 1600mm from the equipment being served. However this can be extended in cases where the outlet box is used to feed desk or screen mounted power supply with integral outlets.

All floor outlet boxes must be completely fitted out with made up modules prior to use.
If the user's requirements are precisely known, this will not present any problem. However, floor boxes are interchangeable and can be easily and quickly relocated to serve particular items of equipment. This is done by unplugging a box and then relocating box and floor panel complete.
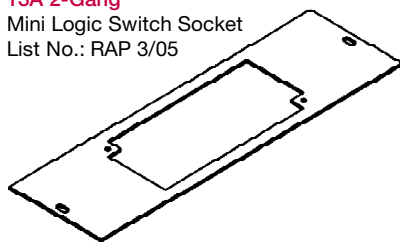
Selection Table For List No.

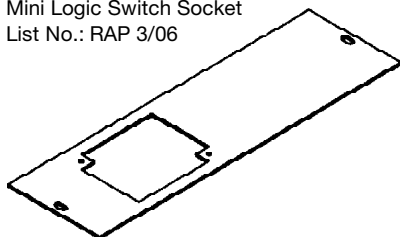| List No.	Colour
91506 GRY	**Grey**

Floor Outlet Box Accessories Plates

POWER

13A 2-Gang
Mini Logic Switch Socket
List No.: RAP 3/05

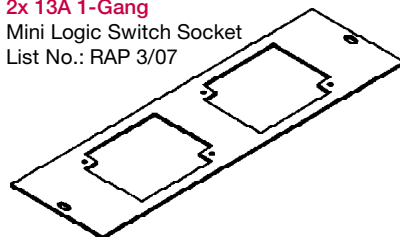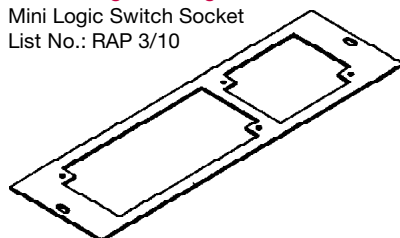**13A 1-Gang**
Mini Logic Switch Socket
List No.: RAP 3/06

2x 13A 1-Gang
Mini Logic Switch Socket
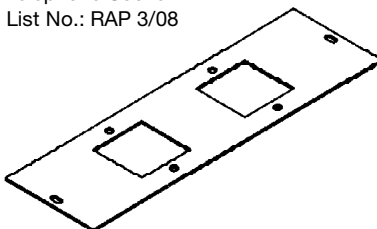List No.: RAP 3/07

13A 2-Gang + 1 Gang
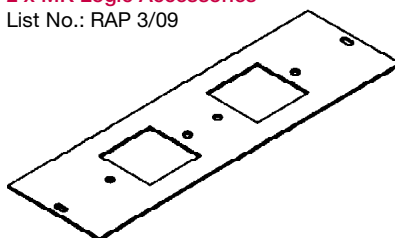Mini Logic Switch Socket
List No.: RAP 3/10

TELECOM

2 x MK Mini Logic
Telephone Socket
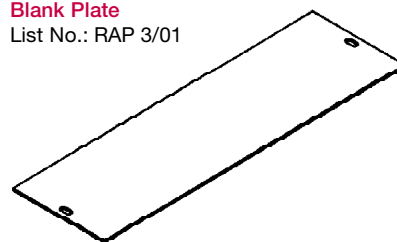List No.: RAP 3/08

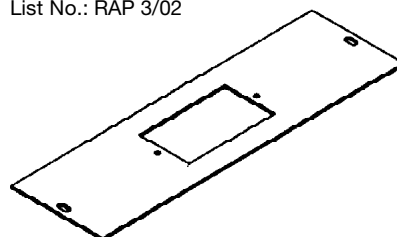**2 x MK Logic Accessories**
List No.: RAP 3/09

DATA

Blank Plate
List No.: RAP 3/01

Cutout for American Type Face Plate
List No.: RAP 3/02

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