

FM MEDICOL™

The **FLUSH MEDICOL (FM)** Patient Care Services Column has evolved from a market requirement for a stylish adaptable vertical trunking system which can be wall recessed. The concepts and desires of architects, consulting engineers and contractors have been taken into account in the development of this product as have the peculiarities of installation and maintenance in healthcare buildings. With a specific application to Mental Health Units, where tamper proof designs are key to patient safety, the clean, fitting free lines of the **FM MEDICOL** offer an uncluttered appearance.

Where the building structure does not permit the use of a horizontal bedhead unit, i.e. where windows obstruct, the **FM MEDICOL** offers a vertical solution that can be simply fed from the ceiling. In a similar manner to our horizontal trunking systems, it accommodates all patient care services for mains power, nurse call, entertainment, medical gases and lighting, by providing up to five individually screened and segregated compartments for the respective services, with more available if necessary. It can be fully customised and is available finished in a range of more than 360 standard colours, each accompanied by a 25 year Applicators Guarantee. Mounted recessed into the wall construction so that the front fascia is flush with the wall surface, the **FM MEDICOL** blends into the decor whilst offering a convenient and serviceable Medical Supply Unit which is supplied fully compliant with ISO 11197.



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Multiple Applications

By its very nature, the **FM MEDICOL** fits recessed to a specific wall aperture. The unique 'side wings' of the structure facilitate concealing the cut edges of the plasterboard meaning a simple economic interface into the partition wall construction. The **FM MEDICOL** is facilitated meaning it is supplied to site as complete with no need to strip down to fit.

In accordance with HTM08-03, where the building structure does not permit a horizontal bedhead unit, i.e. where windows obstruct or multiple structural columns are evident, the **FM MEDICOL** offers a vertical solution that can be simply fed from the false ceiling. In addition, Mental Health Unit require a higher level of protection against unauthorised or unwanted intrusion and this product meets those needs.

Standard Units

A number of standard variants are offered to expedite delivery although bespoke models are always accommodated as necessary.

Co-ordinated Décor

The central fascia panels and side pods can be varied in colour according to the eventual room décor selected. The variety of colours and finishes are encouraged on this system to enhance the overall room appeal and make a feature out of this product, thus creating a focal point. All surfaces of the **FM MEDICOL** are smooth and easy to clean, with no fixing screws evident on any of the visible fascias thus ensuring a high quality appearance, whilst being fully HTM08-03 compliant. We have selected a mix of hard wearing components which will withstand the daily rigours of a ward environment whilst maintaining a fashionable appearance throughout time. This product meets the requirement of HFN30 for infection control.



Services Provision

Each set of services outlets are mounted behind accessory wide). These can be supplied powder coated either to match the pods or in a contrasting colour. Alternatively the side pods are available with an anodised aluminium finish.

Where appropriate, the accessory plates are labelled with the respective legends and/or text to ensure that the user can clearly identify the function of the equipment, all generally in accordance with HTM 08-03.

All of the plates are secured into place with a number of screws depending on the plate's length, which are hidden from view by a bespoke steel polymer infill strip, thus complying with the requirements of HTM 08-03 whilst allowing easy maintenance of the system. Each plate has a supplementary earthing point and earth lead supplied and fitted as standard.



Lighting

The **MEDICOL** has been designed to provide bedhead reading/observation or examination lighting via one or more 'anglepoise'-type lamps, which are fitted to the front of the trunking by a special bedlight bracket. We can supply these lamps from a variety of manufacturers or alternatively they can easily be site-fitted by the installing contractor.

All assembly fixings are hidden from view, ensuring an easy to clean and aesthetically pleasing finish.

Where a complete ward lighting solution is required, the **FM MEDICOL** can be integrated with our state of the art LG2 compliant **wave™** up and downlighter systems.

Nurse Call

The nurse call panel accommodates all extra low voltage items including nurse call, data, voice and entertainment. Cabling access is via the side pods and its arrangement is fully co-ordinated with the respective nurse call manufacturer for locating studs for the respective nurse call PCB grid plate. **CABLEFLOW** medical trunking has been designed specifically to accommodate all commercially available nurse call products. As an independent trunking manufacturer with **no allegiance to any specific nurse call supplier**, we leave the choice of nurse call manufacturer up to you, the user and specifier.

The trunking plates are supplied free issue from us to the nurse call manufacturer, pre-punched, coated and engraved for them to assemble their components onto and test in-house. This in itself ensures compatibility between the two manufacturers, whilst ensuring that the product quality and performance is maintained. The plates are then returned to us for inclusion into the final build.

Medical Gas Services

As with the nurse call provision, our medical trunking systems are capable of accommodating all types of medical gas terminal units to BS EN 737-1: 1998, each hospital or installer having a preference for a particular type. Terminal units are located onto a terminal (type) specific mounting grid, which allows vertical and horizontal adjustment for precise alignment. This grid is in turn mounted onto a base plate, which is fixed directly into position within the base structure. A pipeline bracket and clips are supplied as standard for directing and securing the pipework once they enter the **FM MEDICOL**.

We are able to pre-gas the **FM MEDICOL** within our factory for speed of site installation and all gas sets are supplied with 15mm pipework as standard, although larger sizes can be accommodated. All Terminal Unit sets are suitably purged and pressure tested, completely in accordance to HTM 02-01 and supplied with the appropriate test certificate.

The number of different terminal units available to be fitted varies depending on the exact product selected, but can be any variation of up to six terminal units on a standard **FM MEDICOL** from the full range of medicinal gases as defined within HTM 02-01.



Mains Power

Electrical sockets from the UK, the rest of Europe, the US and other continents can all be accommodated including switched or unswitched socket outlets for standard or non-standard configurations. These can also be colour co-ordinated subject to the respective manufacturer's product range and quantity required. The design of all **CABLEFLOW** medical trunking ensures that no screw fixings are visible on the trunking lid and this applies to all flush mounted outlets, thus complying fully with the requirements of HTM 08-03.

The power plate also provides the mounting for the light control and any nurse call relays which can simply be located into the base unit behind. Relays and diodes are supplied as part of the nurse call system components by the respective manufacturer.

Pre-wiring of the **FM MEDICOL** means a complete factory assembled and tested module arrives on site ready for simple connections to the site infrastructure, either hard wired or using modular wiring needs.



EMC Certification

The unit is independently certified to comply with the primary EMC requirements of the Medical Devices Directive (93/42/EEC) as well as the EMC and Low Voltage Directives. The complete unit has been designed and is manufactured to take account of the requirements of BS EN 60 601-1-2:2007 with regard to the 'Electrical Safety of Medical Electrical Equipment'.

Patient Power Integration

Equipment control units provided as part of a 'Patient Power' provision can be attached to the front of the **MEDICOL** to facilitate a co-ordinated solution to entertainment provision. The actual arrangement will depend upon the Patient Power provider selected.



Standard Units	Standard MEDICOL	Broad MEDICOL
Height (mm)	1928	1928
Width (mm)	502	742
Depth (mm)	104 (sides), 69 (centre)	104 (sides), 69 (centre)
Finish	Powder coated* / Anodised	Powder coated* / Anodised
Standard Content		
Nursecall & Handset provision	✓ x 1	✓ x 1
Anglepoise reading/observation light	✓ x 1	✓ x 1
Two way & off bedlight control switch	✓ x 1	✓ x 1
Twin Switched Socket Outlets	✓ x 2	✓ x 4
Data/Voice Outlets	✓ x 2	✓ x 2
TV Socket	✓ x 1	✓ x 1
Gas Provision		
Oxygen	✓ x 1	✓ x 2
Nitrous Oxide	●	✓ x 1
Medical Vacuum	✓ x 1	✓ x 1
Medical Air (MA4)	✓ x 1	●
Entanox (N ₂ O/O ₂)	●	✓ x 1
AGSS	●	✓ x 1

Key

- ✓ x 8 8 units of this item are included.
- Available as an additional option.

All **MEDICOL** modules can be customised in most areas to meet the individual requirements of each job. Please contact our sales department for details.

All Cableflow products are designed and manufactured in the UK. We reserve the right to change or alter designs from time to time without prior notice. When specifying please check with us to ensure that you are in possession of the latest issue of this datasheet.



Document Reference	Document Description
BS 196: 1961	Non-reversible plugs and socket outlet up to 250 Volts.
BS 476-10: 2009	Fire tests on building materials and structures.
BS 1363-1: 1995	13 A plugs, socket-outlets, adaptors and connection units. Specification for rewirable and non-rewirable 13 A fused plugs.
BS 1363-2: 1995	13 A plugs, socket-outlets, adaptors and connection units. Specification for 13 A switched and unswitched socket-outlets.
BS 1363- 3: 1995	13 A plugs, socket-outlets, adaptors and connection units. Specification for adaptors.
BS 1363- 4: 1995	13 A plugs, socket-outlets, adaptors and connection units. Specification for 13 A fused connection units switched and unswitched.
BS 2754: 1976	Construction of electrical equipment for protection against electric shock.
BS EN 60669: 1996 (replacing BS 3676-1: 1989)	Switches for fixed electrical installations.
BS 5733: 1995	General requirements for electrical accessories.
BS 6496: 1984	Powder organic coatings for application and stoving to aluminium alloy extrusions.
BS 6701: 2010	Telecommunications equipment and telecommunications cabling.
BS 6972: 1988	Specification for General requirements for luminaire supporting couplers for domestic, light industrial and commercial use.
BS 7671: 2008	Requirements for electrical installations. IEE Wiring Regulations. (17th Edition inc amendments)
BS 8300: 2009	Code of Practice: Design of buildings and their approaches to meet the needs of disabled people.
BS EN 737-1: 1998	Medical Gas Pipeline Systems. Terminal units for compressed medical gases and vacuum.
BS EN 737-4: 1998	Medical Gas Pipeline Systems. Terminal units for anaesthetic gas scavenging systems.
BS EN 12373:2001	Aluminium and aluminium alloys. Anodizing.
BS EN 50081-1: 1992	EMC. Generic emission standard. Residential, commercial and light industry.
BS EN 50081-2: 1994	EMC. Generic emission standard. Industrial environment.
BS EN 50082-1: 1998	EMC. Generic immunity standard. Residential, commercial and light industry.
BS EN 50083-2: 2006	Cable networks for television signals, sound signals and interactive services. EMC compatibility.
BS EN 50085-1: 2005	Cable trunking systems and cable ducting systems for electrical installations.
BS EN 50085-2: 2006	Cable trunking systems and cable ducting systems for electrical installations intended for mounting on walls and ceilings.
BS EN 55015: 2006	Radio interference characteristics of fluorescent lamps and luminaires.
BS EN 60439-5: 2006	Low-voltage switchgear and control gear assemblies. Particular requirements for assemblies for power distribution in public networks.
BS EN 60529: 1992	Specification for degrees of protection provided by enclosures luminaires. (IP code)
BS EN 60601-1: 2004 (replaced by BS EN 6060-1: 2007)	Medical electrical equipment. General requirements for safety. Collateral standard. Usability.
BS EN 60601-1-2: 2007	Medical electrical equipment. General requirements for basic safety.



BS EN 60669-1: 2000	Switches for household and similar fixed electrical installations.
BS EN 61008- 1: 2004	Residual current operated circuit-breakers without integral overcurrent protection for household and similar used. (RCCBs)
ISO 11197: 2009	Essential safety Requirements of Medical Supply Units. (supersedes EN 793)
ISO 7396-1:2007	Medical gas pipeline systems. Pipeline systems for compressed medical gases and vacuum.
ISO 7396-2: 2007	Medical gas pipeline systems. Anaesthetic gas scavenging disposal systems.
HBN 00-03: 2010	Clinical and clinical support spaces (in preparation; to supersede Health Building Note 40 Common activity spaces: Volume 2 - Treatment areas and Volume 3 - Staff areas)
HBN 00-09	Infection control in the environment.
HBN 04-01: 2010	Adult in-patient facilities.
HBN 4, Supplement 1	Isolation facilities in acute settings.
HBN 22: 2005	Accident and emergency facilities for adults and children.
HBN 28: 2006	Facilities for cardiac services.
HBN 40: 1995	The patient environment – common activity spaces.
HBN 57: 2003	Facilities for critical care.
HTM 00: 2006	Policies and principles: best practice guidance for healthcare engineering.
HTM 01	Anti-static precautions.
HTM 02-01	Medical gas pipeline systems.
HTM 06-01	Electrical services: supply and distribution.
HTM 06-02	Electrical safety guidance for low voltage systems.
HTM 08-03	Bedhead Services.
HTM 17	Health Building Engineering Installations.
HTM 2011	Emergency Electrical Interference.
HTM 2014	Abatement of electrical interference.
HTM 2020	Electrical safety code for low voltage systems.
HFN 30: 2003	Infection control in the built environment.
CIBSE LG 2: 2008	Lighting guide - Hospitals and health care buildings.
CIBSE LG 3: 2001	Lighting guide - The visual environment for Display Screen Use.
CIE	European Lighting Guide.
IEC 60364-7-710: 2002	Electrical installations of buildings. Requirements for special installations or medical locations. (UK BS7671 Section 7-710)
NHS SPEC C49: 1997	Nurse Call Systems. Revision 3.
72/23/EEC	Low Voltage Directive.
89/336/EEC	EMC Directive.
93/42/EEC	Medical Devices Directive.

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