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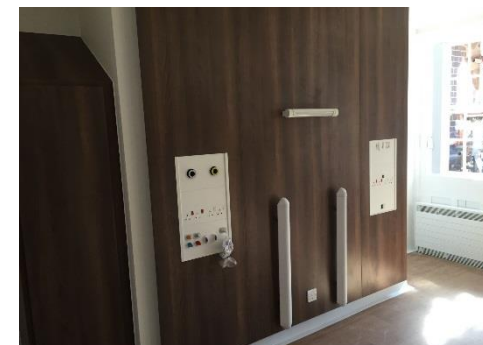
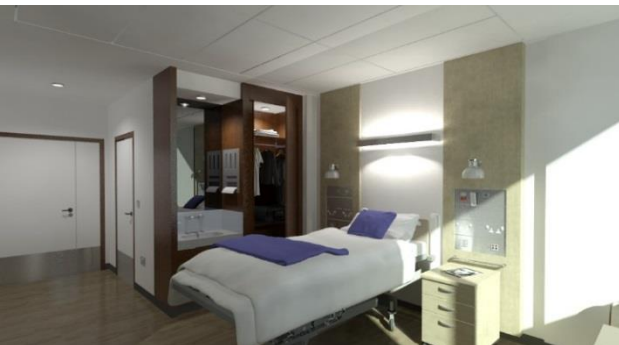
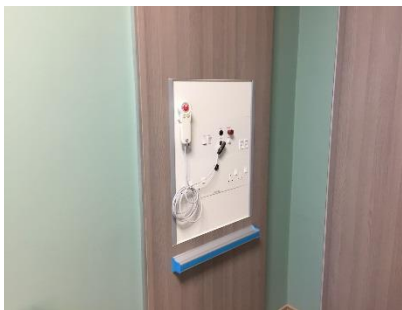
*The **PANEL**TM bedhead services containment enclosures*



CABL  **FLOW**TM
H E A L T H C A R E

applications

CABLEFLOW™





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Innovation is at the heart of an evolutionary healthcare infrastructure. Challenging boundaries whilst being respectful of clinical skills are two valued philosophies which ensure knowledge led developments in bedroom architecture.

At CABLEFLOW we recognise the need to be different, to ensure product development offers practical and sustainable progression whilst always ensuring full compliance with Patient Safety Standards and improving the clinical environment.

We are proud of our British healthcare heritage which offers universal application around the world. Having been conferred a prestigious Queens Award for Innovation our client's take confidence in that unique recognition as a market leader.

As Britain's leading medical supply unit manufacturer our range of solutions meet a vast array of design concepts throughout all clinical environments whether primary or tertiary care areas, and every speciality in-between.

In 2005 our **integra** product range became the first and only bedhead trunking system to achieve royal recognition with the conferment of a **Queens Award for Enterprise: Innovation** from Her Majesty Queen Elizabeth II.

Improving the clinical architecture, the patient experience and ensuring flexibility and adaptation in later use are hallmarks of our innovative integrated lighting solutions. At home in an acute hospital setting or more domestic environments such as Hospice's and the like our systems can be tailored to your requirements.



DESIGN INNOVATION

With a shallow depth of less than 70mm the sleek and slim appearance ensures that valuable clinical floor area is not compromised by unnecessary protrusion. By utilising high grade laminates amalgamated with carefully engineered service pods **PANEL** offers an appearance of quality applied to an otherwise clinical environment.

VARIABLE WIDTH APPLICATIONS

Recognising that existing estate will have substantially variable bed spaces, **PANEL** is available in a whole variation of widths. Supplied as single or multi-leaf **PANEL** the product can be simply tailored to the application.

Meeting the cleaning and environmental requirements of HBN 00-09 has been paramount in the design of this product, ensuring minimal surfaces are exposed which can either collect dust or harbour bacteria. All surfaces can be easily wipe-cleaned whilst facias can be simply both removed and replaced with the use of a bespoke tool to facilitate deep bacterial cleaning when required. Tight fitting butt joints reduce bacteria growth or entrapment and provides a smooth protrusion free finish.

PANEL can also integrate renal services media panels, drains and ancillary equipment from all major RO system providers.

PANEL can also be adapted in its overall height to be installed tight to the finished ceiling which allows the simple access of supply services from high level, thus eliminating the need for enclosing services within the walls. This installation concept substantially speeds up general wall construction whilst reducing the cost of basic installation and encourages a 'plug-and-play' concept to installation.

Alternatively, where the interiors design adopts the bedhead wall as a feature then a shorter height **PANEL** which gives the effect of 'floating' on the bedhead wall can be manufactured with rear fed services. Low level bed sockets are provided where required.

EMC CERTIFICATION AND COMPLIANCE

Protecting electronic components in the patent environment from Electro-Magnetic Interference (EMI) and Radio Frequency Interference (RFI) is of paramount importance. **PANEL** has been designed specifically to ensure full regulatory compliance.

By specifying **PANEL** as a co-ordinated solution you can be satisfied that the EMC and constructional elements of ISO 11197 have been complied with. All of our system solutions have been independently tested by BSI with all of the commercially available nurse call system in operation and are certified accordingly.





The **PANEL**, a simple yet understated reference to this extremely adaptable and attractive Medical Supply Unit embodies our experience and innovative approach to bedhead services, attained over many years and across thousands of installations.

The **PANEL** presents sleek yet tender lines clearly delineating the patients' personal space in a way which ensures the medical components remain unobtrusive whilst creating a 'domestic' environment.

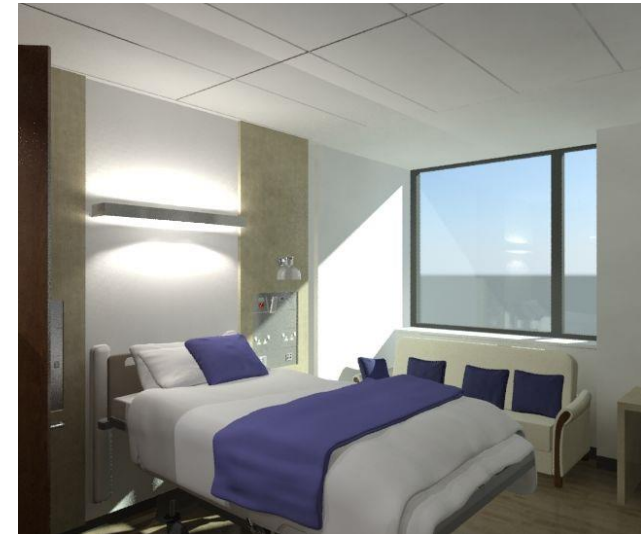
Creating relationship between the medical space and the patient, the uncluttered feel to the bedhead area improves and enhances the patient experience. By presenting a less stressful and ergonomically designed environment **PANEL** allows an ease of nursing care in a simplistic yet functional manner.

Design schemes for healthcare environments are increasingly reflecting a 'patient hotel' approach, needing a relaxed feel and focus, albeit centred around the patient experience.

Laminate finishes applied to the product fascia ensures the designer is allowed a diverse array of design options that can even be varied from room to room on the same scheme.

BEDHEAD SERVICES

Whether used in general in-patient acute bedroom accommodation, higher dependency or elderly care/hospice settings **PANEL** provides mains power, nurse call, data, patient monitoring, lighting control and medical gases all within an unobtrusive multi-functional enclosure, and all meeting the stringent and necessary patient safety requirements of ISO 11197.



The integration of our clean-lined LG2:2008 compliant **WAVE** healthcare specific reading / observation / general room lighting solution ensures the **PANEL** configuration is the single source of bedhead services in each patient location.



YOUR CHOICE

Often, when a client states a particular preference for bedhead services, this invariably refers to the nurse call system to ensure compatibility with existing arrangements. Our bedhead containment systems are universally used with all major nurse call systems and do not affect the choice of nurse call equipment which can still remain as the hospital norm and its simply the containment that's different.

MAINS POWER

Electrical sockets from the UK, continental Europe, the US and other geographical regions can be accommodated, including switched socket outlets for standard supplies, or unswitched for Medical IT / IPS or UPS supplied circuits. These can be colour co-ordinated subject the mandated Wiring regulations in force within the territory of supply.

The design of **PANEL** 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.

Carefully manufactured lid sections butt tightly together to give a clean line appearance, without the need for unsightly joint cover strips. This proven design and assembly concept limits significantly the risk of bacteria growth and allows for simple cleaning of the patient environment as defined within HBN 00 -99.

NURSE CALL SYSTEMS

Each hospital will vary in its individual requirement from the next, none more so than the nurse call system.

PANELS 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.

MEDICAL GAS TERMINAL OUTLETS

As with other patient care services provision, **PANEL** is able to accommodate any type of medical gas terminal outlets, each hospital or installer having a preference for a particular type. Terminal outlets are located onto a terminal (type) specific mounting grid, which allows vertical and horizontal adjustment for precise alignment.

Gas pipes are fully segregated from cabled services accessible by their own lid section meaning gas terminal outlets can be positioned anywhere in the module and pipeline maintained in total safety. The number of gas specific outlets which can be fitted varies depending on the exact product configuration selected. Any variation of terminal outlets for a comprehensive range of medicinal gases as defined HTM 02-01 can be accommodated in our larger profiles, fed from varying AVSU circuits.





POTENTIAL EQUALISATION

The **CABLEFLOW POAG-PES** potential equalisation socket (equipotential earth bonding) is installed on all bedheads to meet the requirement of BS7671 Section 710 and in an appropriate number.

FACIA PANELS

Facia panels are manufactured from 18mm thick fire retardant mdf, finished in a variety of laminates to suit the décor scheme selected.

Please contact our sales department for the choice of finishes from the worlds leading laminate manufacturers

A low-level power socket is incorporated as standard for supplying power to electric patient beds or chairs and compliments the anodised framework with a flush fitting silver anodised 2mm thick cover plate.

FACTORY PRE-FABRICATION

All mains power and lighting circuits can be pre-wired so that simple modular wiring or conventional hard-wired connections can be made at high or low level subject to project specific design requirements.

Factory fitment of certified medical gas terminal units and internal pipework also ensures a speedy connection for mechanical services onsite.

In all cases the options are endless as the modular configuration of the **PANEL** lends itself to purpose designed bedheads and bespoke customisation.

A bespoke extruded aluminium frame anodised AA25 ensures a crisp appearance is achieved to all visible wall interfaces.

CLINICAL MONITOR INTEGRATION

An ancillary patient/clinical/vital signs monitor mounting channel allows the fitment and connection of an LCD flat screen monitor and adjustable arm with tilt capability, along with associated power and data inter-connectivity.

These channels are available in a variety of lengths with concealed structural support allowing fitment during manufacture or where called for, retrofitted after installation.







AMBIENT AND FUNCTIONAL LIGHTING

The integration of up/down lights, LED reading lights and LED night lighting ensures the **PANEL** acts as the sole area of delivering patient care services within the patient space, whilst ensuring that the latest state-of-the-art energy efficient light sources are offered.

Whether the project calls for a third-party supplied overbed light, or the utilisation of the **CABLEFLOW** healthcare specific in-patient luminaire **WAVE** (see separate data sheet), the integration, fitment and wiring of the overbed light on the central leaf could not be easier. Integration with nurse call handset reading light control and general room is also easy.

PATIENT POWER MONITORS

Equipment control units provided as part of a 'PatientPower' provision can be attached to the front of the **PANEL** to facilitate a co-ordinated solution to entertainment or vital signs provision. The actual arrangement will depend upon the equipment provider selected. Mounting channel for vital signs monitors can be easily integrated and ensure suitable support and load distribution across the **PANEL** framework for maximised effectiveness.





BEDHEAD BUFFERS

Ensuring that the bedhead wall is robust and can still take the impact of everyday bed movement, the integration of vertical bedhead buffers ensures the functionality of **PANEL** is maintained. These can be third party supplied or fitted by our own technicians as part of our offering.

Buffers are mounted through the **PANEL** using bespoke fixings but where the wall takes the impact as with conventional bedhead buffers and not the **PANEL** itself.

MEDICAL EQUIPMENT RAIL

The inclusion of medical equipment rail is easily accommodated and can be fitted to meet any or all of the recommended mounting heights for Rail defined in HTM 08-03.

Our **CABLEFLOW** Medical Equipment Rail (see separate brochure) is designed and manufactured to meet the requirements of BS ISO 19054 and is also available as a standard wall mount version for other clinical areas.

This ensures that a consistent product type can be used across an entire installation irrespective of whether medical supply units are installed or not. Rail is anodised AA25 with a blue cover insert to conceal the fixing mechanism and ensure a bacteria resilient finish.

INSTALLATION

The system does not use proprietary first fix mounting plates and therefore can be installed by any competent tradesman. However, we have recognised the desire of some clients to procure a total supply and installation package from a specialist manufacturer and our experienced Contracts Department specialises in the installation of our trunking systems.

All Cableflow installation technicians are trained to the highest standards, and equipped with the most up to date machinery to achieve the best possible result when our products and their skills are combined.

Further information about this service can be obtained by contacting our Sales Team who will be pleased to provide you with a costing on your specific application.



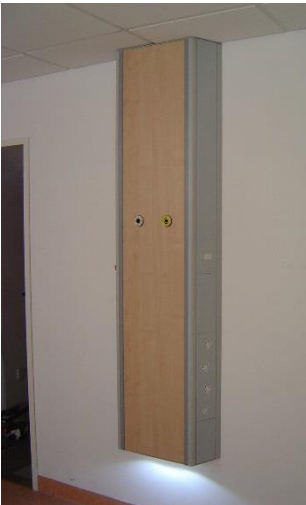
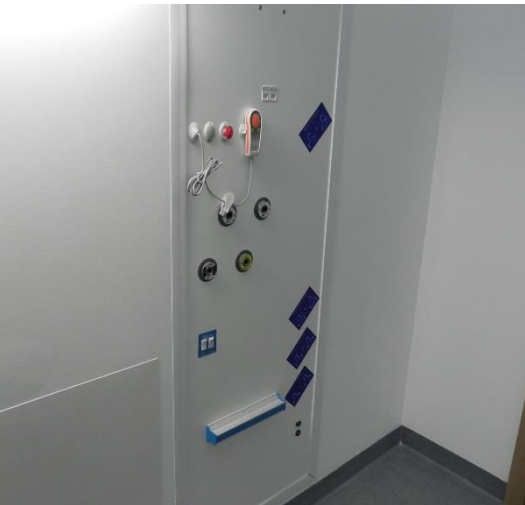
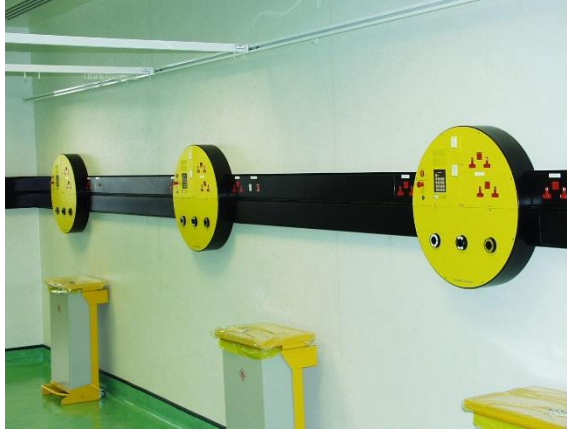


Standards compliance

Document Reference	Document Description
BS 476-10: 2009	Fire tests on building materials and structures. Guide to the principles, selection, role and application of fire testing and their outputs
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- 4: 1995	13 A plugs, socket-outlets, adaptors and connection units. Specification for 13 A fused connection units switched and unswitched
BS EN 60669-1:1999+A2:2008	Switches for household and similar fixed-electrical installations. General requirements
BS EN 60598-1:2015	Luminaires. General requirements and tests
BS 5266-1:2011	Emergency lighting. Code of practice for the emergency escape lighting of premises
BS 5733:2010+A1:2014	General requirements for electrical accessories. Specification
BS EN 12206-1:2004	Paints and varnishes. Coating of aluminium and aluminium alloys for architectural purposes. Coatings prepared from coating powder
BS 6701: 2010	Telecommunications equipment and telecommunications cabling. Specification for installation, operation and maintenance
BS 6972: 1988	Specification for general requirements for luminaire supporting couplers for domestic, light industrial and commercial use
BS 7671:2008+A3:2015	Requirements for Electrical Installations. IET Wiring Regulations
BS 8300:2009+A1:2010	Design of buildings and their approaches to meet the needs of disabled people. Code of practice
BS EN ISO 9170-1:2008	Terminal units for medical gas pipeline systems. Terminal units for use with compressed medical gases and vacuum (formally BS EN ISO 9170-1)
BS EN ISO 9170-2:2008	Terminal units for medical gas pipeline systems. Terminal units for anaesthetic gas scavenging systems (formally BS EN 737 -4)
BS EN ISO 7599:2010	Anodizing of aluminium and its alloys. General specifications for anodic oxidation coatings on aluminium (formally BS EN 12373:2001)
BS EN 12464-1: 2002	Light and lighting. Lighting of work places. Indoor work places
BS EN 13032-2: 2004	Light and lighting. Measurement and presentation of photometric data of lamps and luminaires. Presentation of data for indoor and outdoor work places
BS EN 61000-6-3:2007+A1:2011	Electromagnetic compatibility (EMC). Generic standards. Emission standard for residential, commercial and light-industrial environments (formally BS EN 50081-1)
BS EN 61000-6-4:2007+A1:2011	Electromagnetic compatibility (EMC). Generic standards. Emission standard for industrial environments (formally BS EN 50081-2)
BS EN 61000-6-1:2007	Electromagnetic compatibility (EMC). Generic standards. Immunity for residential, commercial and light-industrial environments (formally BS EN 50082-1)
BS EN 50083-2:2012	Cable networks for television signals, sound signals and interactive services. Electromagnetic compatibility for equipment
BS EN 50085-1:2005+A1:2013	Cable trunking systems and cable ducting systems for electrical installations. General requirements
BS EN 50085-2: 2006	Cable trunking systems and cable ducting systems for electrical installations. Cable trunking systems and cable ducting systems intended for mounting on walls and ceilings

Document Reference	Document Description
BS EN 60439-5: 2006	Low-voltage switchgear and controlgear assemblies. Particular requirements for assemblies for power distribution in public networks
BS EN 60529:1992+A2:2013	Degrees of protection provided by enclosures (IP code)
BS EN 60598-2-22:1998+A2:2008	Luminaires. Particular requirements. Luminaires for emergency lighting
BS EN 60601-1-6:2010+A1:2015	Medical electrical equipment. General requirements for basic safety and essential performance. Collateral standard. Usability
BS EN 60601-1-2: 2007	Medical electrical equipment. General requirements for basic safety and essential performance. Collateral standard. Electromagnetic compatibility. Requirements and tests
BS EN ISO 11197:2009	Medical supply units
BS EN ISO 7396-1:2007+A3:2013	Medical gas pipeline systems. Pipeline systems for compressed medical gases and vacuum
ISO 19054	Rail Systems for supporting medical equipment
ISO 7396-2: 2007	Medical gas pipeline systems. Anaesthetic gas scavenging disposal systems
HBN 00-03	Designing generic clinical and clinical support spaces
HBN 00-04	Circulation and communication Spaces
HBN 00-09	Infection control in the built environment
HBN 04-01	Adult in-patient facilities: planning and design
HBN 04-02	Critical care units
HBN 4, Supplement 1	Isolation facilities for infectious patients in acute settings
HBN 6	Facilities for Diagnostic imaging and interventional radiology:
HBN 07-01	Satellite Dialysis Unit
HBN 07-02	Main Renal Unit
HBN 09-02	Maternity Care Facilities
HBN 09-03	Neonatal Units
HBN 57: 2003	Facilities for critical care
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	Management of bedhead services in the health sector
HTM 17	Health Building Engineering Installations
HTM 2014	Abatement of electrical interference
HTM 2020	Electrical safety code for low voltage systems
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
93/42/EEC	Medical Devices Directive







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