



MADE IN BRITAIN
DISTRIBUTED WORLDWIDE

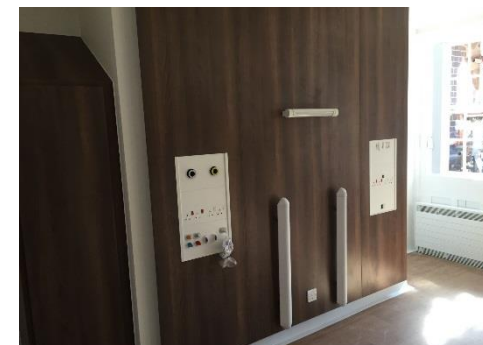
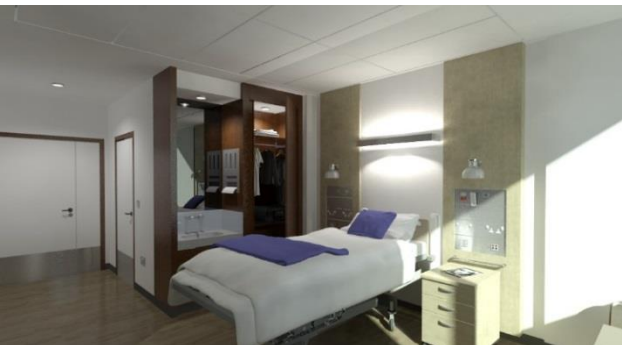
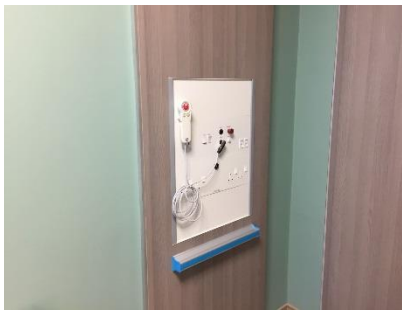
Dr SuTM *labour delivery room services unit*



CABL  FLOWTM
H E A L T H C A R E

applications

CABLEFLOW™





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.



SYSTEM OVERVIEW

Dr Su, a vertical Bedhead Services Trunking System designed specifically for LDRP/Delivery rooms where the contrast between clinical space and what is otherwise a healthcare hotel bedroom requires a fine balance.

Recent changes in the environmental design requirements of LDRP rooms, typified by reference to HBN 09-02, seek to develop a calming and less clinical environment for both the patient and clinical staff alike.

The **Dr Su** has been specifically designed with these considerations in mind whilst acting as the sole source of delivery of patient care services within the patient environment.

Providing capacity for a full range of patient care services within a neat and stylish enclosure. Unsightly services are partially concealed from view, thus giving a homely and domestic feel to the overall environment. Manufactured from extruded aluminium with laminated MDF facias, **Dr Su** is available in more than 300 colour combinations with laminate or coloured fascia panels designed to present a feel of comfort and calm in the patient environment.

An unobtrusive ergonomic design with semi concealed services outlets ensures that the room environment has a homely yet functional feel, while portraying a high level of design. The display of services, including calming supplementary room lighting that can be varied by the expectant mother to suit her mood at the time, provides a revolutionary concept in the provision of patient care services within the room.

Manufactured from a system of aluminium extrusions with a decorative fascia panel of either, laminates or a simple painted finish, the **Dr Su** can be customised to provide a full range of electrical, nurse call, data & voice, medical gas and communication services for general patient care.

INNOVATION

Innovation is what drives Cableflow and is reflected in a Queen's Award for Enterprise: Innovation in 2005.

Going that bit further, searching and probing for solutions that make health care more efficient and safer for patients and clinicians alike. Our ability to offer something innovative and which is flexible, adaptable and user friendly are key hallmarks of the continued Cableflow success story, and all designed and **manufactured in Great Britain**.





CO-ORDINATED DÉCOR

The central fascia panel finish can be varied according to the eventual room décor selected and is made from flame retardant high density MDF.

The hue of colours and finishes available are encouraged on this system to enhance the overall room appeal and make a feature of the product, thus creating a focal point.

All surfaces of the **Dr Su** are smooth and easy to clean, with no fixing screws evident on any visible surface thus ensuring a high quality appearance and meeting the requirement of HTM 08-03. We have adopted a mix of hard wearing components which will withstand the daily rigours of a delivery room environment whilst maintaining a fashionable appearance throughout time.

By adopting a domestic feel to the product, both mother and her partner are sure to feel at ease in a homely environment, where the extent of the clinical facilities are not immediately evident. By creating this environment, staff morale is lifted and offers greater efficiency to working procedures whilst also encouraging a sense of well being in the patient 'hotel'!

SERVICES PROVISION

Dr Su offers semi-concealed services outlets for power, data, nurse call and lighting control in an enclosure system providing with a comfort that sets it apart from a conventional sterile and unwelcoming delivery room environment.

Medical gas terminal outlets are neatly accommodated in the front fascia panel of the **Dr Su**, thus ensuring that access is uninhibited at any time. A full provision of gas terminal units can be accommodated as defined in HTM 02-01.

Integral stainless steel vertical IV poles for attaching various monitoring and patient care equipment, such as sphygmomanometers or drip stands, can be neatly integrated onto either side of the **Dr Su** if required, especially relevant when acute patient monitoring equipment is required as part of high dependency care.

Designed to be located directly behind the bed position **Dr Su** can be varied in width to suit each application, even a complete bedhead width, ensuring uninhibited access to the cabled outlets for power, data and nurse call on either side of the bed or couch.

FACTORY ASSEMBLY

A growing demand for pre-fabricated, pre-gassed and pre-wired medical supply units has bought about evolutionary change to healthcare construction. Benefitting from reduced costs of in-house fabrication versus site costs, all **Dr Su** configurations are available pre-wired for mains power and pre-gassed.

Supported by test certification to BS 7671 & HTM 02-01 (BS EN 793) each unit is tested and certified in accordance with the prescribed manufacturing and installation standards.

MAINS POWER

Electrical socket outlets from the UK, continental Europe, the US and other geographical regions can be accommodated, including switched or unswitched versions for standard or non-standard supplied circuits. Where called for these can be colour co-ordinated subject to the respective manufacturer's product range.

Where outlets are supplied by a Medical IT system (IPS) then these are generally colour coded blue, unswitched with an isolated earth and labelled 'Medical Equipment Only' in accordance with BS 7671 Section 710.

EQUIPOTENTIAL EARTH BONDING

Equipotential earth bonding connections are fitted in accordance with BS7671 Section 710, using our **CABLEFLOW POAG-PES** outlet (see separate data sheet).

MEDICAL GAS TERMINAL OUTLETS

As with all other patient care services provision, **Dr Su** 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 to allow vertical and horizontal adjustment for precise alignment within the system.

Medical gas pipelines are fully segregated from cabled services, accessible by their own cover section meaning terminal outlets can be positioned almost anywhere in the module and the pipeline maintained in total safety.

The number of gas specific outlets which can be fitted varies depending on the exact product configuration selected and accommodates any variation of terminal outlets as defined HTM 02-01. Dual gas circuits can easily be accommodated.

MEDICAL EQUIPMENT RAIL

Where required, **Dr Su** also incorporates Medical Equipment Rail complying with the global constructional requirements for rail as defined in ISO 19054.

The rail can be located on the front face of **Dr Su** at a variety of heights as required by the customer, generally as defined in HTM 08-03. A concealed internal mounting support facilitates appropriate loading of the rail to ensure safety in use.

NURSE CALL SYSTEMS

All **Cableflow** bedhead trunking & containment products are universally adaptable to accommodate any manufacturers nurse call system.

Dr Su offers a variety of options for nurse call system integration, whether mounted within the side sections, or facia mounted onto the front facia panel.

Where the re-use of existing wall mounted nurse call components is more economical for the project the front mdf facia can be factory or site prepared to accept conventional wall mounted plates.

Where the nurse call system is unknown at order stage this can be easily added post manufacture, and easily installed on site by simply cutting into the mdf facia. A nurse call back box and conduit link to high level is supplied centrally as standard to allow for future adaptation and flexibility.

DE-STRESSING THE PATIENT

De-stressing patients in often challenging environments is a heartfelt holistic consideration of clinical care. Knowing the patient is in the appropriate clinical place is one thing, but having an array of medical equipment in a disorderly manner with flashing lights and sounds all adds to patient stress. **Dr Su** provides composite and co-ordinated solutions to minimise and manage these issues efficiently and integrates competently with other products.





DATA, PATIENT MONITORING & TV SERVICES

TV, data, fibre optic and voice services are all accommodated within the **SOLO** system. Proprietary supplied outlets can be surface mounted or flush fitting for a co-ordinated appearance.

Where 'Patient Power' initiative products are bedside, such as Hospedia, Airwaves, HTS and the like, then the support bracketry and mountings may be built into **Dr Su** to reduce the impact upon the bedhead wall, both visual and engineering wise. Power and data feeds are then integral within **Dr Su** meaning a reduced interface requirement with the wall and less 'post install' works in the patient environment.

CONCEALED LID FIXINGS

In keeping with our screw free fascia concept, **Dr Su** uses a bespoke lid retention slug that neatly slides into a channel created by the base-lid assembly preventing it from being opened inadvertently.

A specific lid removal tool accesses the channel and allows the lateral movement of the slug, thus ensuring that no damage is caused to the powder coated finish. The transparent slug has no visual impact on the appearance of the trunking, contributing towards the superb aesthetics of all **CABLEFLOW** medical trunking systems .

IV SUPPORT POSTS

The inclusion of a 25mm diameter IV post or 38mm accessory arm support to the front fascia allows infusion bottle holders, IVAC pumps, perfusion equipment, collection jars etc, to be located and moved as required.

These are available in two standard lengths of either 1000mm or 1200mm although almost any length is available as a non-standard.

VITAL SIGNS MONITOR SUPPORT

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.



STANDARDS COMPLIANCE

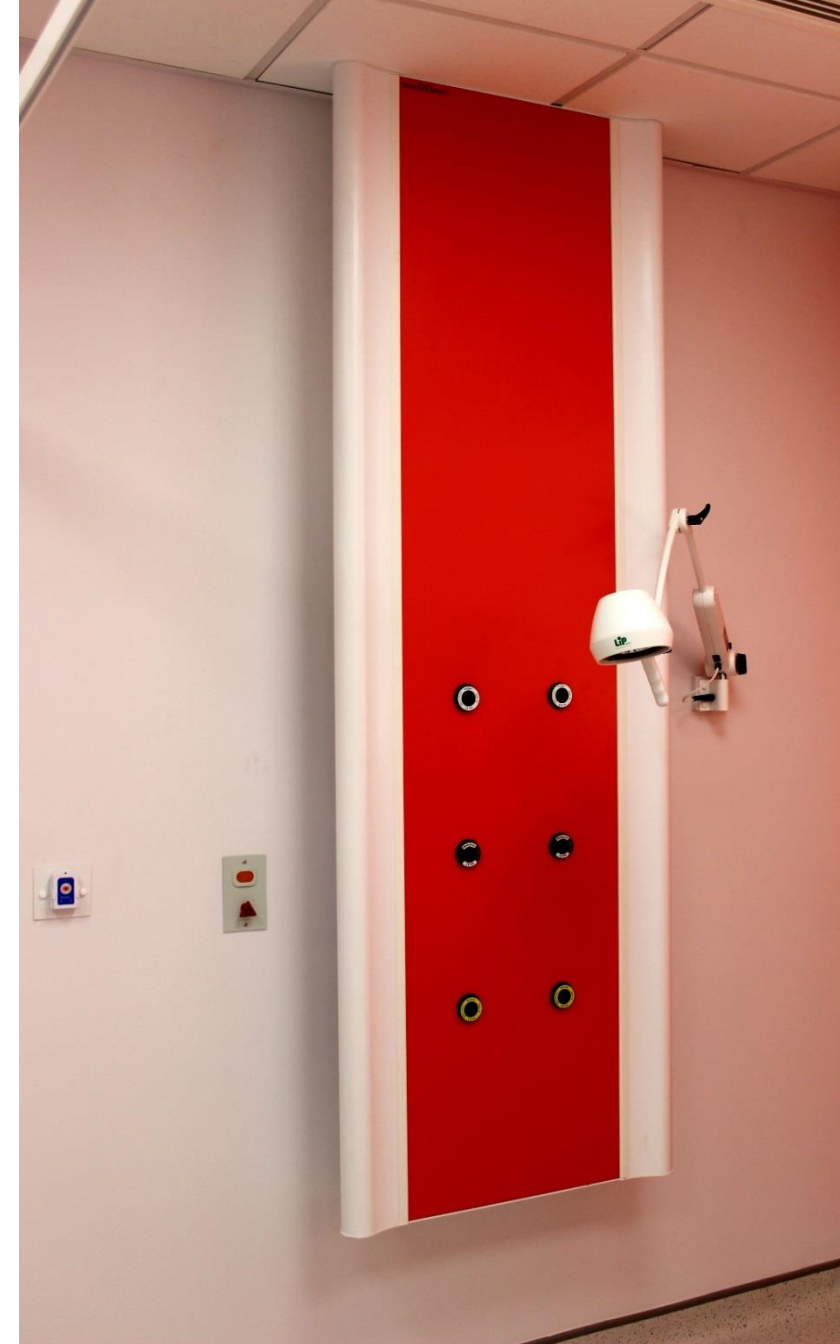
Manufactured from extruded aluminium, **SOLO** is certified compliant to the Medical Devices Directive 93/42/EEC and offers ergonomically considered shaping. The product is CE marked accordingly.

Protecting electronic components in the patent environment from Electro-Magnetic Interference (EMI) and Radio Frequency Interference (RFI) is of paramount importance. **Dr Su** has been designed specifically to ensure that each chamber, and in turn each individual compartment, controls both the emission and reception of any such Interference.

By specifying **Dr Su** you can be satisfied that the EMC elements of ISO 11197 have been complied with, and have been independently tested for by BSI with all of the commercially available nurse call system in operation. The product is CE marked accordingly.

EASE OF MAINTENANCE

With a low maintenance requirement **SOLO** represents excellent investment and improved life-cycle cost. Optimising equipment lifespan is key in design to ensure as near 'maintenance free' equipment as is practicable. Using modular components makes access easier with reduced down time and where flexibility allows for adaption in provision over the installation life-cycle.



BED BUFFER

The inclusion of bed buffers which attach directly to the wall ensures that the **Dr Su** is protected from damage by the constant movement of beds and mobile equipment.

LIGHTING

The **Dr Su** has been designed to provide the sole source of room illumination when combined with the **CABLEFLOW integra wardLIGHT**, an asymmetric system of uplighters which neatly interface with the sides of the **Dr Su** to provide a luminaire for general room illumination in accordance with the requirements of CIBSE LG2:2008. These luminaires are indirect uplighters and are sited outboard of the bed position so as to protect a prone patient from any resultant glare on the ceiling.

By using the latest energy efficient TL5 lamps and gear the **Dr Su** lighting technology has been derived from our hugely successful range of linear Bedhead Services Trunking Systems with fully integrated ambient and reading lights. The lighting solutions provide both a calming and a warm feel to the room with variable methods of dimmable control.

Artificial lighting is critical in the overall design of the patient care environment and its clever and variable use adds to the functionality of the room. Using lamps with colour rendering at 4000K, variations in skin tones and colour can be easily defined and identified by nursing staff.

Two vertical luminaires offer further lighting options and have been cleverly integrated into the sides of the **Dr Su**, neatly concealed so as not to be immediately visible until energised. These provide a general wall wash of light behind the bed whilst also acting as a calming night-time provision. This luminaire can be supplemented by a series of LED's where the illumination colour can be changed or supplemented throughout a colour range, all under the full control of the expectant mother.

HYGIENE AND INFECTION CONTROL

Infection control has never been more at the forefront of healthcare design. **Dr Su** has been developed taking advantage of and embracing our knowledge of trunking product design whilst meeting the requirements of HBN 00-09.

With proven resilience to most agents used in healthcare cleaning operations, careful consideration of cable and pipeline management, easy to clean surfaces and sterilisable components are all integrated features of the **Dr Su** design concept.



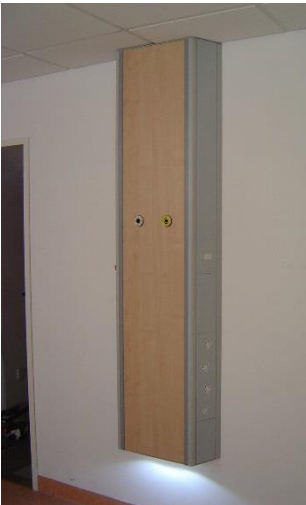
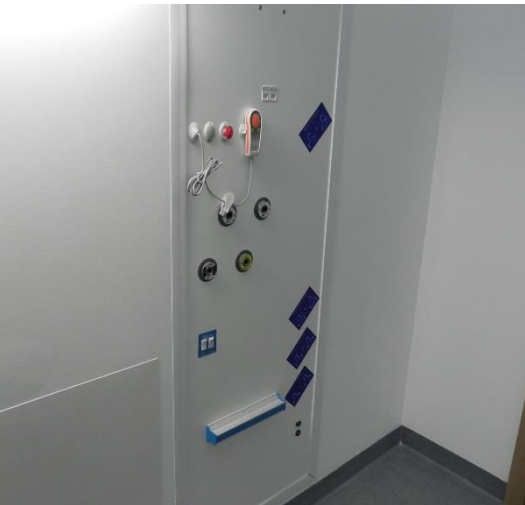
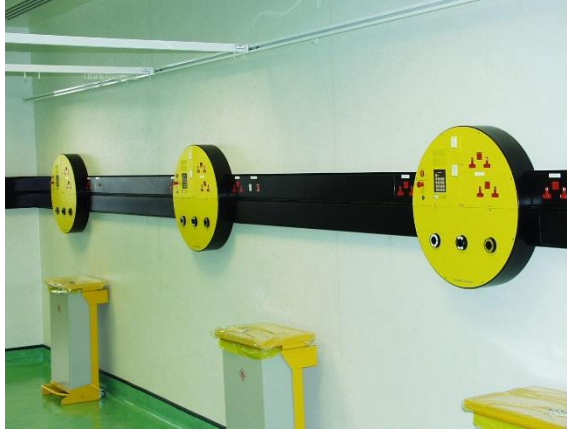


Standards compliance

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 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 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







MADE IN BRITAIN
DISTRIBUTED WORLDWIDE

CABLE  **FLOW**™

Cableflow
International
Limited

For full product data sheets go to our website or contact us directly

www.cableflow.com

Cableflow International Limited
Windsor House | Abbey Barn Road
High Wycombe | Buckinghamshire
HP11 1NN | United Kingdom

(tel) 00 44 (0) 1494 52 88 11
(fax) 00 44 (0) 1494 52 11 88
(email) sales@cableflow.com

Registered in England 2356618

Copyright 2015 v1

