

SOLO™

Designed specifically for use in Neo Natal Intensive Care Units (NICU), **SOLO** offers the lowest possible visual impact on the care environment without compromising in any way the functionality of the system.

It's compact design and ability to carry, locate and support the plethora of equipment required in these areas sets **SOLO** aside from alternative NICU services solutions whilst meeting the recommendations of HBN 08-02

The ever-changing face of healthcare and the need to be at the forefront of care provision for patients and clinicians, demands the very latest in care technology. Technology is available but at what cost? So ensuring the balance between technological advancement, innovation and affordability rests as much with manufacturers as it does with purchasers.

Innovation is what drives Cableflow and is reflected in a 2005 Queen's Award for Enterprise: Innovation. Going that bit further, searching and probing for solutions that make health care more efficient and safer for patients and clinicians alike. The ability to offer something new which is flexible, adaptable and user friendly are key hallmarks of the continued Cableflow success story.



Although designed for NICU locations **SOLO** is beautifully practical.

Equally at home in other types of emergency care areas such as Recovery, anaesthesia rooms or any location where a large volume of monitoring equipment is required and where wall space is limited, **SOLO** creates an optimised working environment where technologies appear seamlessly integrated, and where intelligent design delivers improved efficiencies and clinical function.

Whilst vertical units are not clinically favoured for general in-patient areas (HTM 08-03) there are locations which in fact benefit from such a solution and higher dependency areas are one such location.

Flexibility

SOLO is supplied as standard with an array of equipment and a multitude of 'add on' accessories meaning that its design can be adapted to suit any specific project needs, with flexibility for adaptation at a later stage if required. Individuality and highly flexible equipping options where almost unlimited configuration arrangements ensure that any application can be accommodated provides a 'future-proof' solution ensuring that the design of today will meet the needs of tomorrow.

The **SOLO** solution concept can be tailored to suit even the tightest of budgets but show cost savings over conventional servicing methods previously adopted. **SOLO** is as flexible as your requirements, both now and in the years ahead.

Whether single room locations or multi cot rooms where the need for vision panels are a necessity between rooms, **SOLO** can be neatly and easily positioned to allow clear lines of visual communication between such areas.

Designed to locate either side of a cot or bed to facilitate dual sided nursing care, **SOLO** is also manufactured to

service two locations from one enclosure located centrally between patients.

Services Provision

SOLO provides mains power, medical gas, data, patient monitoring, ambient night lighting, IV post, monitor screen mounting, fluid bag supports, earth bonding, unused 13amp plug parking positions cable and pipeline management solutions all in one composite bedhead services trunking system.

All services are located within easy reach of clinicians and provide a sensible and uncluttered workflow area ensuring a specific accessible cot space with full 360° access to the patient. By presenting an increased field of use and uncluttered floor area to the clinician **SOLO** is tailored to suit your specific application to enhance this benefit. Flexibility associated with modular design allows the end user to specify the precise arrangement and configuration to suit the specific nursing methodology which, it's accepted, varies from project to project.

A one-size-fits-all approach has never been part of the Cableflow philosophy and underpins our bespoke manufacturing capability.

Totally fixing free, **SOLO** offers a visually aesthetic enclosure fully compliant with ISO 11197 and HTM 08-03. Screw-less facias offer a less industrial product whilst softened lines ensure a comforting appearance to this sleek medical supply unit.

Modularised Factory Assembly

Fully factory assembled, pre-wired and pre-gassed in accordance with HTM 02-01 **SOLO** is simple and quick to install. Either fitted to 'float' on the wall and rear fed from concealed wall supplies or, fitted up to the ceiling for top feed **SOLO** offers a range of design options.

SOLO must be mounted onto solid walls or on lightweight partitioning using appropriate fasteners and wall supports as defined in the product installation instructions.



IV Post & Monitor Screen Supports

The inclusion of a 25mm diameter IV post to the front fascia allows the required number of infusion bottle holders, IVAC pumps, perfusion equipment, collection jars etc to be located and moved as required, and frees up floor space taken by the conventional ancillary provision of IV posts.

This also allows equipment to be rotated through 180° for an improved angle of view or switched from one side of the patient to the other.

A vertical monitor arm bracket allows the fitment and connection of an LCD flat screen monitor and adjustable arm with tilt capability with power data inter connectivity.

Mains Power

Given the intended location of SOLO, power socket outlets will be fed from a Medical IT (IPS) system and are supplied as isolated dual earth, blue and unswitched in accordance with HTM 06-01 and BS7671 sector 7.

Where installed in radiotherapy and/or imaging areas then MHRA's MEIGaN recommendations are also applicable.

Each pair of sockets is supplied with an equipotential earth bonding point as defined in EN60601-1.

ORIO™ Cable and pipeline management

Unique to the design of **SOLO** is the integration of the award winning* **ORIO** cable and tube management disc.

The modern hospital is awash with tubes, cables and wires which are used to administer medication, fluids, blood or simply control equipment and we are fully familiar with the operational issues these present including kinking, inadvertent tripping, pulling and the incorrect disconnection due to plethora of cables.

Supplied as standard components on each 25mm diameter support post the ORIO™ provides an easily

cleaned and simple method of securing and directing cables and pipelines from the medical electrical equipment in a manner which makes it safe and easy to use. The snap in design of the polymer moulding allows cables and tubes to be easily secured, adjusted and removed.



Lighting Integration

Examination lighting attachments are also a key element of paediatric nursing care and the location of easy to reach adjustable arm lights is at the heart of the concept of total care delivery.

High quality light sources that provide examination illumination to CIBSE LG2:2008 and EN 12464-1 as well as allowing the clinicians to safely navigate their way around the room at night are essential components for the environment. **SOLO** will accommodate adjustable arm lights from all major suppliers.

De-stressing the patient

The integration within the scheme design of the very cleverly designed **WAVE** up/downlight by Cableflow adds to an engineered and stylish environment.

De-stressing parents as well as the young patient is a heartfelt holistic consideration of paediatric care, recognised in the evolution of **SOLO**. 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 buzzers all adds to the parents and patients stress. **SOLO** provides composite and co-ordinated solutions to minimise and manage these issues efficiently.

Hygiene and infection control

Infection control has never been more at the forefront of healthcare design. **SOLO** has been developed taking advantage of and embracing our knowledge of trunking product design whilst meeting the requirements of HFN 30.

Flush fitting surfaces using carefully selected materials assist in meeting hygiene standards and further ensures that most agents used in healthcare cleaning operations have no deleterious effect on the components.

Careful consideration of cable and pipeline management, easy to clean surfaces and sterilisable components are all integrated into the **SOLO** design concept.

Colour Options

Supplied in a polyester powder coated white finish (RAL 9010) with light grey trims (RAL 7023) as standard, **SOLO** is available in an array of colours to enhance, brighten and co-ordinate any environment.

Choose from our standard range of colours which are all supported by our Applicators Guarantee for 25 years, laminate timber effect or coloured central infill's to enhance the appeal of the product and installation.

Your only limit is your imagination!

Industry Research

Cableflow's unique experience across all areas of medical supply unit design is supported by our research programme with clinicians and healthcare planners alike to ensure that the final design is ergonomically suited to the workplace and will ultimately support improved and safe paediatric care.

SOLO represents a change in the concepts of how design teams service NICU, PICU & SCBU locations based upon validated research, whilst offering a more cost competitive solution to conventional ceiling mounted pendants and the like.





brochure,
specificall
y when
used in a
UK
healthcare
facility.

**SOLO has
been
designed
by us
and is
manufact
ured in
Great**

**Britain using, wherever possible, components
sou Ease of Maintenance**

Standards Compliance

Manufactured from extruded aluminium with an integral earthing design, **SOLO** is certified and CE marked accordingly to the Medical Devices Directive 93/42/EEC and offers ergonomically considered shaping .

The product fully complies with the requirements of the product and performance standards as listed in this

With a very low maintenance threshold SOLO represents excellent value for money and life-cycle cost. Optimising equipment lifespan is key in design to ensure as near 'maintenance free' equipment as is practicable and using modular components makes access easier and reduced down time.

* Red Dot Design award 2009

ORIO is a registered trademark of Inora AS with patents pending.



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 4533, BS EN 60598: 1989	Specification for fixed general purpose luminaires
BS 5266-10: 2008	Emergency Lighting Systems
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 12464-1: 2002	Light and lighting. Lighting of indoor work places
BS EN 13032-2: 2004	Light and lighting. Photometric data of lamps and luminaires for indoor and outdoor work places
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 lumineaires (IP code)
BS EN 60598-1: 2004	General requirements and tests for luminaires
BS EN 60598-2-22: 2008	Luminaires. Particular requirements. Luminaires for emergency lighting
BS EN 60601: 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 21	Facilities for maternity care
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

