

The T□TEM medical gas outlet enclosure































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 for clinicians and patients alike.

We are proud of our British healthcare heritage which offers universal application around the world. Having been conferred both a prestigious Queens Award for Enterprise: Innovation and a Kings Award for Enterprise: Innovation users of our products and systems take confidence in this unique recognition of Cableflow as a market leader.

Recognised as Britain's foremost medical supply unit manufacturer our range of products whether standard or bespoke offer solutions to satisfy many in-patient design concepts across all clinical environments whether primary or tertiary care areas, and every speciality in-between.

In 2005 our **integra** product became the first and only linear bedhead trunking system to achieve Royal recognition with a **Queens Award for Enterprise: Innovation** from Her Majesty Queen Elizabeth II. This achievement was further endorsed in 2023 with a **Kings Award for Enterprise: Innovation** for our (POAG) equipotential earth bonding socket.

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



MEDICAL SUPPLY UNIT

TOTEM offers an extremely adaptable and attractive Medical Supply Unit which embodies our experience and innovative approach to bedhead services, all attained over many years and across thousands of installations worldwide.

The **TOTEM** presents sleek yet soft lines to an enclosure which clearly displays medical gas outlets in the patient environment in an aesthetically striking format, avoiding the disruption of penetrating walls and allowing a fully serviceable pipeline route to the terminal outlet. **TOTEM** is primarily a retro-fit option but may also be used in an initial stage of construction where speed of installation and pipeline accessibility are key. TOTEM is fully compliant with the requirements of BS EN ISO 11197:2019.

BEDHEAD SERVICES

Whether used in general in-patient acute bedroom accommodation, higher dependency or elderly care/hospice settings **TOTEM** accommodates medical gas and vacuum pipelines and associated terminal outlets in any complexity and a variety of formations.

Where medical gas additions or adaptations are simply required the ease of install of **TOTEM** is an attractive proposition as it is in a new build scheme.

Retrofitting medical gas terminal outlets always presents an infection control risk with unsightly surface mounted pipelines clipped to the wall and terminal outlets in aesthetically compromised plastic enclosure boxes always at risk of damage.

TOTEM changes this landscape and offers a solution to these constant healthcare environment issues.

Supplied in variable lengths to suit the coordination of ceiling heights with outlet mounting heights, **TOTEM** is a simple yet functional solution. Designed to be installed tight to the finished ceiling which allows the simple access of the medical gas pipelines through the ceiling, and where historical ceiling voids are otherwise congested in retrofit environments, the pipeline simply penetrates through the fibrous tile or board and into the medical supply unit enclosure with the end cap acting as a neat ceiling interface.

The constant changing healthcare estate requires both complex and minor installation amendments to suit need and also legislation or regulatory changes. This is none more so the case than for the provision of gases for medicinal use.

TOTEM has been developed within our overall family of medical gas accessories and medical supply units for those locations requiring simple medical gas outlet additions or adaptations and where all other services are unaffected.

DESIGN INNOVATION

With a shallow depth of 103mm the sleek and slim appearance ensures that valuable clinical wall space is not compromised. Amalgamating high grade laminates with neatly engineered, robust polyester powder coated side extrusions **TOTEM** is an effective, unobtrusive solution to medical gas outlet provision which avoids the cost, time and disruption of breaking into wall construction.

VARIABLE WIDTH APPLICATIONS

TOTEM is offered in three width versions **TOTEM1**, **TOTEM2** or **TOTEM3** subject to the orientation of outlets to be provided all meeting HTM 02-01 compliance.

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





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FACIA PANELS

Facia panels are manufactured from 10mm thick fire retardant mdf, finished in a variety of laminates to suit the décor scheme selected with a rearfaced balancer.

Please contact our sales department for the choice of finishes from the worlds leading laminate manufacturers although on small volumes this may be restrictive.

As a standard off-the-shelf product we offer our extruded aluminium side sections and end caps in RAL 9003, and our facia panels in Formica Crystal White F3091.

The design of **TOTEM** offers a fixing free appearance and is fully HTM 08-03 and HTM 02-01 compliant.

FACTORY PRE-FABRICATION

TOTEM is offered as a fully factory assembled Medical Supply Unit to meet the purchasers exact requirements either gassed or ungassed. This approach allows for quick and simple installation on site.

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

IMPACT RESISTANCE

Protecting the pipeline and terminal outlets is a core requirement of a Medical Supply Unit. The construction of **TOTEM**, utilising polyester powder coated steel end caps (aluminium if in MRI rooms) and extruded aluminium side sections ensures the impact resistance requirements as defined in BS EN ISO 11197:2019 are satisfied.



MEDICAL GAS TERMINAL OUTLETS

As with all of our Medical Supply Unit containment systems across our extensive range. TOTEM is able to accommodate any manufacturers type of medical gas terminal outlets, each hospital or installer having a preference for a particular outlet.

Gas pipelines are fully accessible behind a removable facia cover and the outlet or pipeline maintained in total safety without the need to dismantle ceilings. The number of gas specific outlets which can be fitted varies depending on the exact product configuration selected.

FACTORY PRE-GASSING

Every **TOTEM** can be supplied ungassed or gassed with internal 15mm medical grade pipelines and terminal outlet assemblies all fully tested in accordance with HTM 02-01, and from all major manufacturers. This approach aids the speed of installation on site and of course improved opportunity to meet budget expectations.

PRODUCT FAMILY

All of our Medical Supply Unit containment systems have a unified approach to appearance and engineering philosophy, so no matter what clinical area they are applied to there is a consistency of appearance and maintenance understanding.



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MEDICAL EQUIPMENT RAIL

Medical equipment rail for mounting collection jars or catheter dispensers is easily accommodated 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 EN ISO 19054 and is also available as a standard wall mount version so that other clinical areas can be appropriately matched.

INSTALLATION

The **TOTEM** system does not use proprietary first fix mounting plates and therefore can be installed by any competent tradesman directly to almost any wall structure with appropriate fixings to suit the application.

At CABLEFLOW 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. Please contact us for further information and costings for your specific requirement.

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.

CERTIFICATION AND COMPLIANCE

As a core element of the medical gas pipeline system the **TOTEM** enclosure is fully compliant with the constructional and performance requirements of BS EN ISO 11197:2019.

Naturally ventilated by virtue of its design to meet the requirements of the standard where oxidising gases are installed, **TOTEM** provides a sleek and adaptable solution with safety at the very core of the product concept.

All of our system solutions have been independently tested and CE marked.

Each **TOTEM** is supplied complete with a manufacturers Declaration of Conformity as meeting the Essential Requirements of the Medical Device Regulations (MDR).



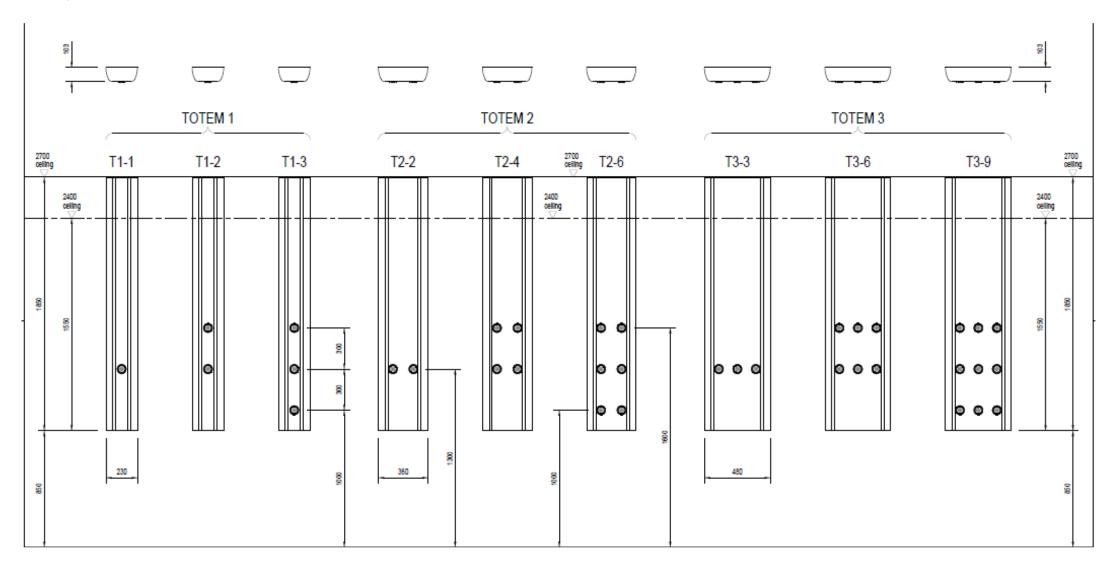
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STANDARD AND BESPOKE OPTIONS

TOTEM is designed for quick installation and quick delivery. Each product style is available in a variety of configurations as standard to suit the gas outlet quantities required, with appropriate mounting heights as defined in HTM 02-01 and when considered with the floor-to-ceiling height of the specific application. The following configurations are available for either a 2400mm or 2700mm ceiling height (add ../24 or ../27 to the end of the product specification code e.g. TOTEM 1.1/24) as standard. Where a specific application is required a template is available which can be completed and issued with your enquiry or order and can be manufactured as a bespoke item.





Document Reference	Document Description	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 EN ISO 9170-2;2008	Terminal units for medical gas pipeline systems. Terminal units for anaesthetic gas scavenging systems
BS 1363-1:2016 + A1:2018	13 A plugs, socket-outlets, adaptors and connection units. Specification for rewireable and non-rewireable 13 A fused plugs	BS EN ISO 7599:2010	Anodizing of aluminium and its alloys. General specifications for anodic oxidation coatings on aluminium
BS 1363-2:2016 + A1: 2018	13 A plugs, socket-outlets, adaptors and connection units. Specification for 13 A switched and unswitched socket- outlets	BS EN ISO 11197:2019	Medical supply units
BS 1363-4:2016 + A1 2018	13 A plugs, socket-outlets, adaptors and connection units. Specification for 13 A fused connection units switched and unswitched	ISO 19054:2006 + A1:2016	Rail Systems for supporting medical equipment
BS 5266-1:2011	Emergency lighting. Code of practice for the emergency escape lighting of premises	HBN 00-03	Designing generic clinical and clinical support spaces
BS 5733:2010+A1:2014	General requirements for electrical accessories. Specification	HBN 00-04	Circulation and communication Spaces
BS 6701: 2016	Telecommunications equipment and telecommunications cabling. Specification for installation, operation and maintenance	HBN 00-09	Infection control in the built environment
BS 6972: 1988	Specification for general requirements for luminaire supporting couplers for domestic, light industrial and commercial use	HBN 04-01	Adult in-patient facilities: planning and design
BS 7671:2018 + A2 2022	Requirements for Electrical Installations 18th Edition IET Wiring Regulations (incorporating Section 710 (Special Locations)	HBN 04-02	Critical care units
BS 8300-1:2018	Design of buildings and their approaches to meet the needs of disabled people. Code of practice	HBN 4, Supplement 1	Isolation facilities for infectious patients in acute settings
BS EN 12206-1:2021	Paints and varnishes. Coating of aluminium and aluminium alloys for architectural purposes. Coatings prepared from coating powder	HBN 6	Facilities for Diagnostic imaging and interventional radiology:
BS EN 12464-1: 2021	Light and lighting, Lighting of work places. Indoor work places	HBN 07-01	Satellite Dialysis Unit
BS EN 13032-2: 2017	Light and lighting. Measurement and presentation of photometric data of lamps and luminaires. Presentation of data for indoor and outdoor work places	HBN 07-02	Main Renal Unit
BS EN 50083-2:2012	Cable networks for television signals, sound signals and interactive services. Electromagnetic compatibility for equipment	HBN 09-02	Maternity Care Facilities
BS EN 50085-1:2005+A1:2013	Cable trunking systems and cable ducting systems for electrical installations. General requirements	HBN 09-03	Neonatal Units
BS EN 50085-2-1:2006	Cable trunking systems and cable ducting systems for electrical installations. Cable trunking systems and cable ducting systems intended for mounting on walls and ceilings	HBN 57: 2003	Facilities for critical care
BS EN 60439-5: 2006	Low-voltage switchgear and control gear assemblies. Particular requirements for assemblies for power distribution in public networks	HTM 00	Building Engineering in the Health Sector
BS EN 60529:1992+A2:2013	Degrees of protection provided by enclosures (IP code)	HTM 02-01	Medical gas pipeline systems
BS EN 60598-1:2021	Luminaires. General requirements and tests	HTM 06-01	Electrical services: supply and distribution
BS EN 60598-2-22:2014 +A1: 2020	Luminaires. Particular requirements. Luminaires for emergency lighting	HTM 06-02	Electrical safety guidance for low voltage systems
BS EN 60601-1-6:2010+A1:2013 +A2:2020	Medical electrical equipment. General requirements for basic safety and essential performance. Collateral standard. Usability	HTM 08-03	Management of bedhead services in the health sector
BS EN 60601-1-2: 2015 + A1:2021	Medical electrical equipment. General requirements for basic safety and essential performance. Collateral standard. Electromagnetic compatibility. Requirements and tests	HTM 17	Health Building Engineering Installations
BS EN 60669-1:2018	Switches for household and similar fixed-electrical installations. General requirements	HTM 2014	Abatement of electrical interference
BS EN 61000-6-3:2021	Electromagnetic compatibility (EMC). Generic standards. Emission standard for residential, commercial and light- industrial environments (formally BS EN 50081-1)	HTM 2020	Electrical safety code for low voltage systems
BS EN 61000-6-4:2019	Electromagnetic compatibility (EMC). Generic standards. Emission standard for industrial environments	CIBSE LG 02: 2019	Lighting guide - Hospitals and health care buildings
BS EN 61000-6-1:2019	Electromagnetic compatibility (EMC). Generic standards. Immunity for residential, commercial and light-industrial environments (formally BS EN 50082-1)	CIBSE LG 3: 2001	Lighting guide - The visual environment for Display Screen Use
BS EN ISO 7396-1:2016 +A1:2019	Medical gas pipeline systems. Pipeline systems for compressed medical gases and vacuum	CIE	European Lighting Guide
BS EN ISO 7396-2: 2007	Medical gas pipeline systems. Anaesthetic gas scavenging disposal systems	NHS SPEC C49: 1997	Nurse Call Systems. Revision 3
BS EN ISO 9170-1:2017	Terminal units for medical gas pipeline systems. Terminal units for use with compressed medical gases and vacuum	EU MDR 2107/745	EU Medical Device Regulation
		UK MDR 2002	UK Medical Device Regulations (SI 2002 (no. 618, as amended)





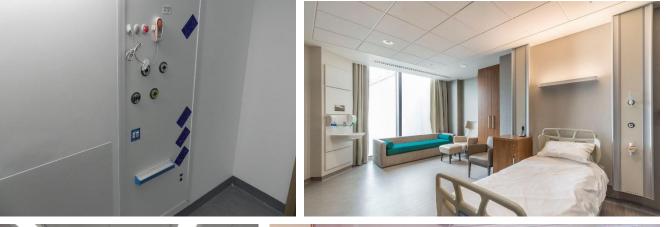












































For full product data sheets go to our website or contact us directly

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