

Laboratory Trunking

The use of dado trunking systems in laboratory environments is not a fundamentally new concept but is an area where great care should be taken in selecting the appropriate materials.

Those pathogens and general deleterious bacteria which evolve and which can develop within these various testing environments is ever- changing whilst the progress and advancement of science dictates that ever more harmful and destructive bacteria must be faced.

Bio-decontamination is key to ensuring that these laboratory environments remain safe, clean and reliably functional. There are now a number of chemical agents which have become common place in the cleansing process for many bio-decontamination requirements in the pharmaceutical, biomedical and healthcare sectors.

Whether as viricides, bactericides or the like, these may include, but are not limited to; Hydrogen Peroxide Vapour (HPV), Formaldehyde gassing and amongst others, more latterly an emergence of the preference for Chlorine Dioxide, disinfecting by its oxidising process.

Formaldehyde for many years has been the accepted process for bio-decontamination of microbiological laboratories, safety cabinets, chambers and rooms but as pathogens increase in complexity and resistance harsher bio-decontamination requirements will often prevail.



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Extruded Aluminium construction

Given the harshness of these 'kill' agents, selecting an appropriate building services containment system which is resilient over time and can withstand exposure to these chemical cleansing processes is paramount.

Knowing that the agent used will not cause a failure in the trunking system or the components thereof is important to the overall function of the area. Alongside performance is appearance, safe in the knowledge that discolouration and durability of the finished system is not adversely affected during use and bio-decontamination.

Cableflow's relentless quest for design perfection, where innovation and technology combine, ensures we create the most revolutionary products for the most abstract of environments. Carefully design extruded aluminium trunking systems with hinged lids for easy maintenance access and a proven polyester powder coat finish offer a solution which also withstands the test of time, all supported by a 25 year manufacturers guarantee.

Resilient to bio-decontamination chemicals and able to assist in the bio-decontamination process are key hallmarks of our systems.



with many lab environments incorporating medical and functional

gases a range of gas terminal units and valves by leading industry providers can be catered for. Located in a separate chamber for both gases and liquids as required, the requirements of ISO 11197 are fully embraced.

Building Services integration

For use in dado or lab bench trunking locations, we also provide a ceiling mounted system for housing bio-environment IP55 rated luminaires, speaker systems, fire detectors, BMS cabling and most other building services, all surface mounted and accessible. Extruded aluminium trunking systems offer a longer life and appearance over other materials and are best suited to the harsh biomedical environments encountered in laboratory locations.

By working with specialist luminaire manufacturers we are able to provide a complete IP55 luminaire solution.

Specifically designed lids which hinge out of the base section to facilitate maintenance and aid the bio-decontamination process when activated are added features of these systems.

Multi-compartmentalisation using aluminium dividers ensures the segregation and screening of cabled services.

Bio-Seal cable entry

A bespoke 'bio-seal' cable gland, chemically resilient and which offers designed cable management for services entry in a concertinaed design allows for ease of cable access and inspection.



Off-site manufacturing

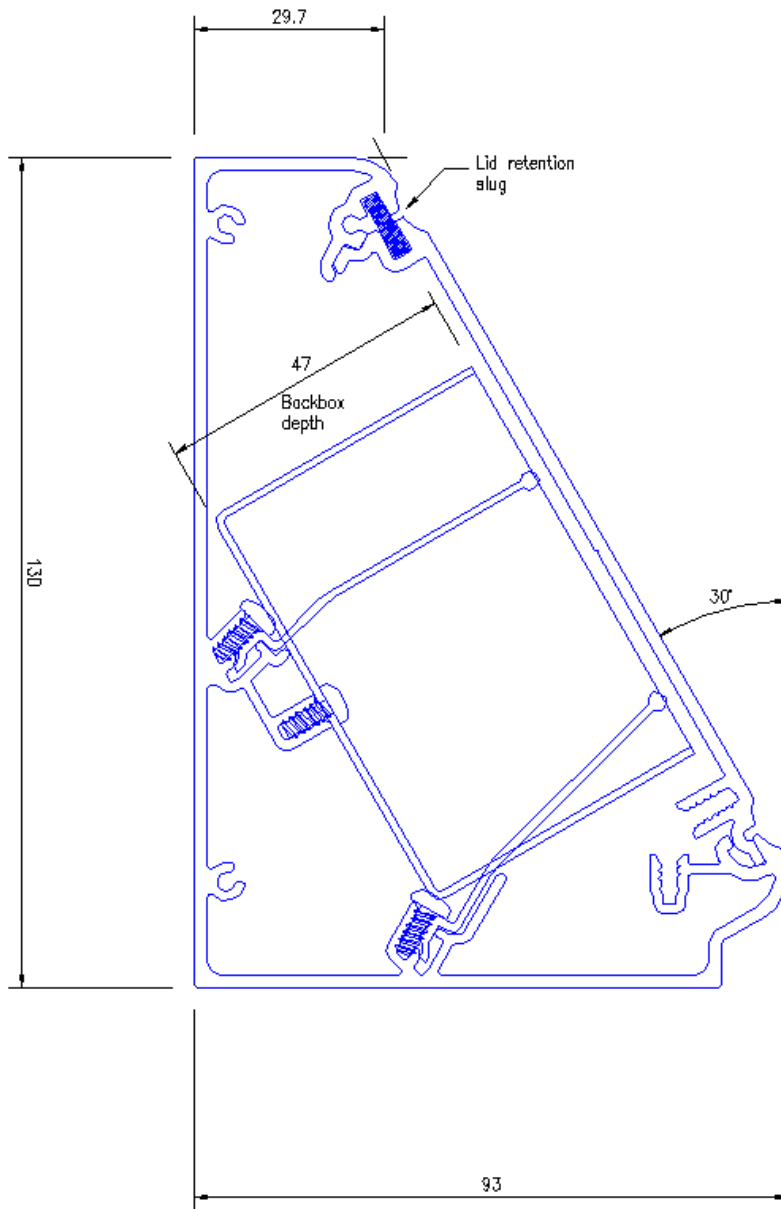
Making use of our Off-Site Manufacturing (OSM) capability, bespoke modules can be pre-assembled and wired using composite cabling solutions so that the integrity of the installation is maintained and to ensure that projects can be fitted out on time and budget. Multi-chamber solutions also mean that laboratory or medical gasses and liquids can be easily accommodated.

Our laboratory suitable trunking systems can be retro-fitted to those benching and desking systems manufactured by bespoke lab-bench companies such as Lab Furnishings, Waldner, Byrum, Labflex and the like.

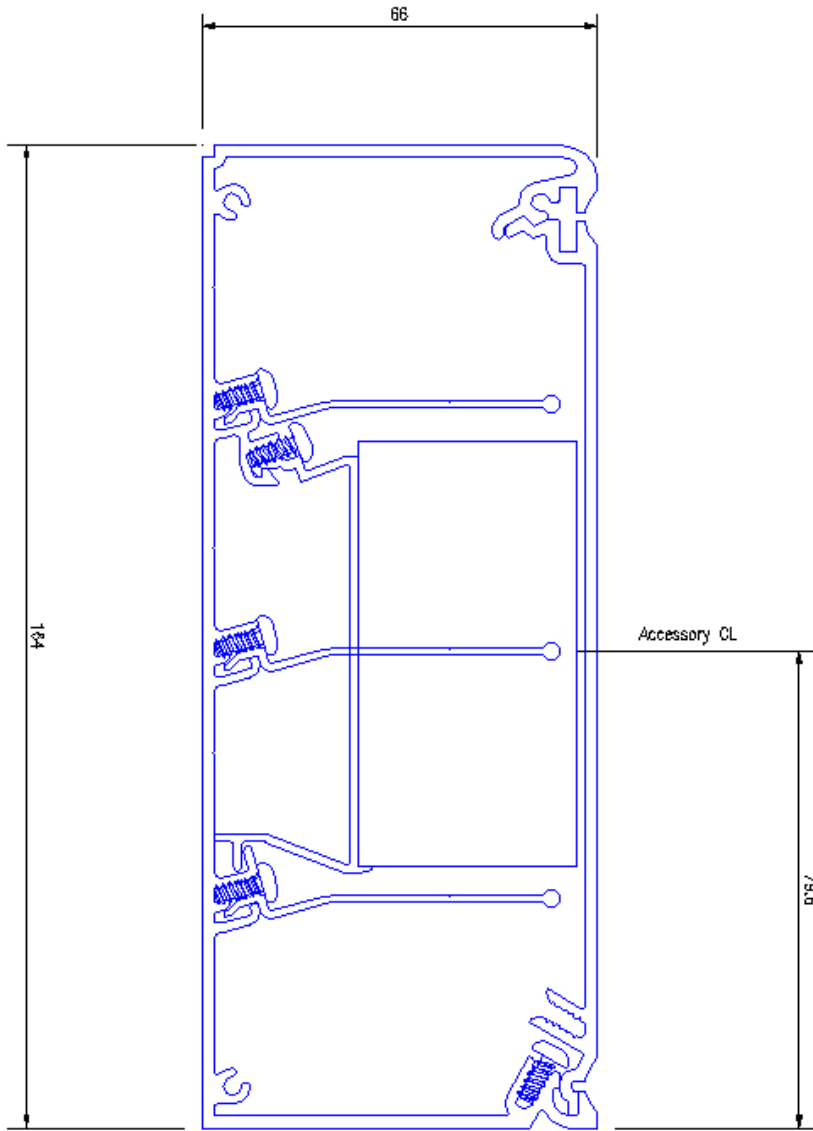


Profile Drawings

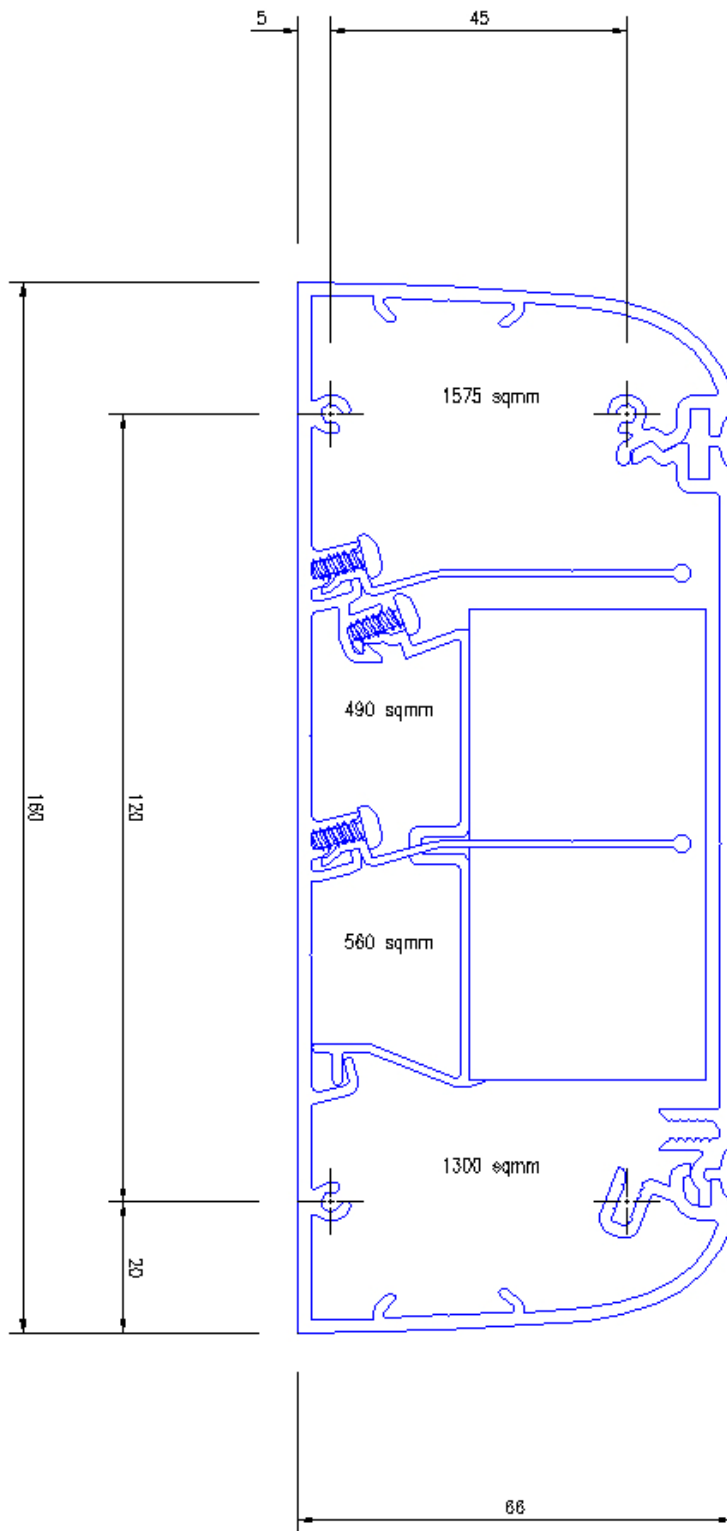
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For further information and to discuss your specific application contact our sales team.

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: 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

