



Envirom™ H-Sys Trunking & V-Sys and NV-Sys Headwalls

Bedhead Trunking Systems

SPECIFICATION

Envirom™ V-Sys & NV-Sys Headwall Systems

The headwall system shall be constructed from custom designed extruded aluminium sections with customer specified powder coated 60% gloss finish fascia panels. All visible extruded aluminium sections shall be powder coated RAL9010 60% gloss by a DuPont/ Akzo Nobel approved powder coating specialist, offering a minimum guaranteed service life of 25 years. End caps shall be manufactured from 3mm thick UV stabilised and fire retardant high-impact Fabex 578. A removable UV stabilised polymer extrusion shall cover all fixing screws, providing a tight seal to prevent dust traps. UV stabilised PVC wall seals shall run the full length of the headwall, providing a dust tight seal between the sides of the headwall system and the wall. Segregated service compartments shall run the length of the headwall to carry medical gas pipes, low-voltage electrical cables and ELV/data, with segregation of services being maintained throughout. Each headwall unit shall be supplied pre-piped, wired and certified.

The design and configuration of the headwall shall fully comply with all relevant applicable standards, including HTM 2007, HTM 2011, HTM 2015, HTM 2020, HTM02-01, HTM 2022, HTM08-03, BS EN ISO 11197, BS EN 60601-1, BS 6496, BS 7671, BS EN 60439, IEC 60364-7-710.

Medical Gases

The compartment for housing medical gas services shall be capable of running pipes of 15mm diameter generously spaced to facilitate simple on-site brazing to the piped distribution system. The headwall shall be capable of housing at least three terminal units in a horizontal array. Copper pipes shall be manufactured from phosphorous de-oxygenated non-arsenical copper to BS EN 1412:1996 grade CW024A and be manufactured to metric outside diameters in accordance with BS EN 13348:2001R250 (half hard). Degreasing of pipe shall be such that there is less than 20mg/m² (0.002mg/cm²) of hydrocarbons on the degreased surface when tested by the method specified in ASTM B280 clause 12. The type of terminal unit installed shall be specified by the client. Hoses shall not be used to connect the medical gas terminal units to the distribution system.

Electrical Sockets

Electrical sockets shall normally be fitted in the side panels of the headwall, with additional sockets being fitted to the front fascia panel as required. Electrical sockets shall be wired in ring or radial mains to circuits as specified by the customer.

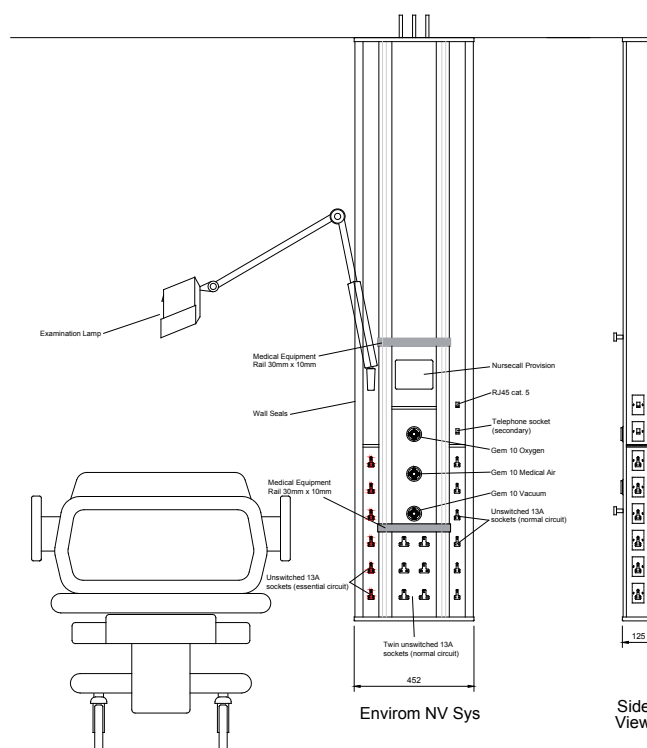
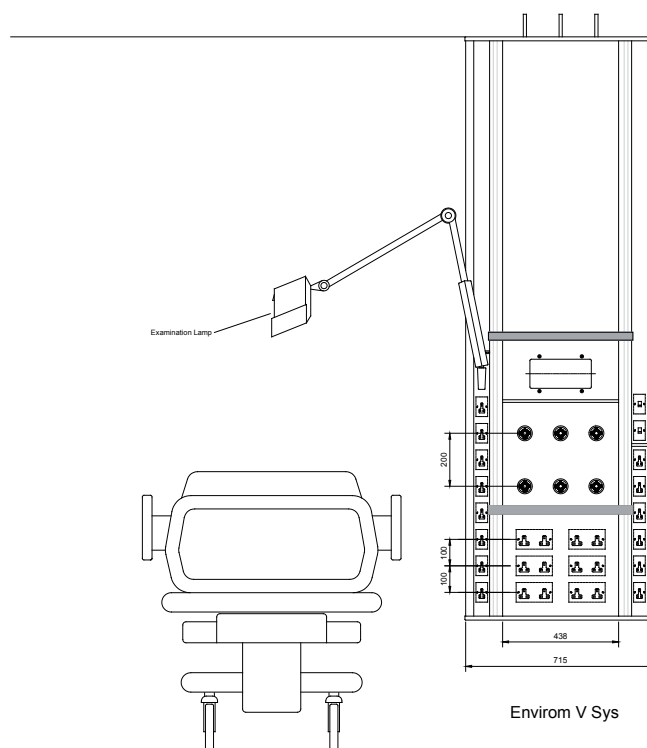
Communications

Provision for, or fitting of the nurse call system shall be co-ordinated by the headwall supplier. Data sockets including, but not limited to RJ45 and telephone sockets shall be installed in the headwall at the time of manufacture.

Medical Equipment Rail

Medical equipment rails shall be designed in accordance with BS EN 12218:1999, manufactured from a hollow rectangular stainless steel profile of 30mm high by 10mm deep. It shall be possible to retrofit further medical rails to the bedhead unit after installation without the need for power tools and without the need to disrupt the continuity of services provided by the bedhead unit.

Typical Configurations



Envirom™ H-Sys Bedhead Trunking System

The bedhead trunking system shall be constructed from custom designed extruded aluminium sections with customer specified powder coated 60% gloss finish fascia panels. All visible extruded aluminium sections shall be powder coated RAL9010 60% gloss by a DuPont/Akzo Nobel approved powder coating specialist, offering a minimum guaranteed service life of 25 years. End caps shall be manufactured from 2.5mm thick UV stabilised and fire retardant high-impact Fabex 578. A removable UV stabilised polymer extrusion shall cover the fascia fixing screws, providing a tight seal to prevent dust traps. A UV stabilised elastomeric wall seal shall run the full length of the bedhead unit, providing a dust tight seal between the upper surface of the trunking and the wall and shall cater for a 10mm tolerance in the flatness of the mounting surface. Three segregated service compartments shall run the length of the bedhead unit to carry medical gas pipes, low-voltage electrical cables and ELV/data, with segregation of services being maintained throughout. Each bedhead unit shall be supplied pre-piped, wired and certified.

The design and configuration of the bedhead units shall fully comply with all relevant applicable standards, including HTM 2007, HTM 2011, HTM 2015, HTM 2020, HTM 2022, HTM02-01, HTM08-03, BS EN ISO 11197, BS EN 60601-1, BS EN 60598-1 and BS EN 60598-2-25, BS 6496, BS 7671, BS EN 60439, IEC 60364-7-710, CIE, CIBSE LG2, CIBSE LG3.

Medical Gases

The compartment for housing medical gas services shall be capable of running 3 pipes of 15mm diameter with axes on a common vertical plane to facilitate simple on-site brazing to the piped distribution system. Copper pipes shall be manufactured from phosphorous de-oxidised non-arsenical copper to BS EN 1412:1996 grade CW024A and be manufactured to metric outside diameters in accordance with BS EN 13348:2001R250 (half hard). Degreasing of pipe shall be such that there is less than 20mg/m² (0.002mg/cm²) of hydrocarbons on the degreased surface when tested by the method specified in ASTM B280 clause 12. The type of terminal unit installed shall be specified by the client.

Lighting

Diffusers shall be manufactured from extruded fire-retardant Lexan® ML3290 polycarbonate resin, incorporating prismatic inner surfaces to maximise efficiency of light distribution from the chosen source.

Efficiency shall be further enhanced by the use of mirror finish reflectors manufactured from Alanod Miro4 or Miro27 aluminium, achieving a minimum clarity and total reflection to TR-2 or DIN 5036-3 of 95%.

Luminaires shall be provided with electronic ballast's suitable for use with TL5 high efficiency fluorescent tubes, with a power factor rating of at least $\cos\phi=0.93$. Lighting controls shall be as agreed with the client and shall include options for local and/or remote control, control via the nursecall handset or control via a Digital Addressable Lighting Interface (DALI) or equivalent system.

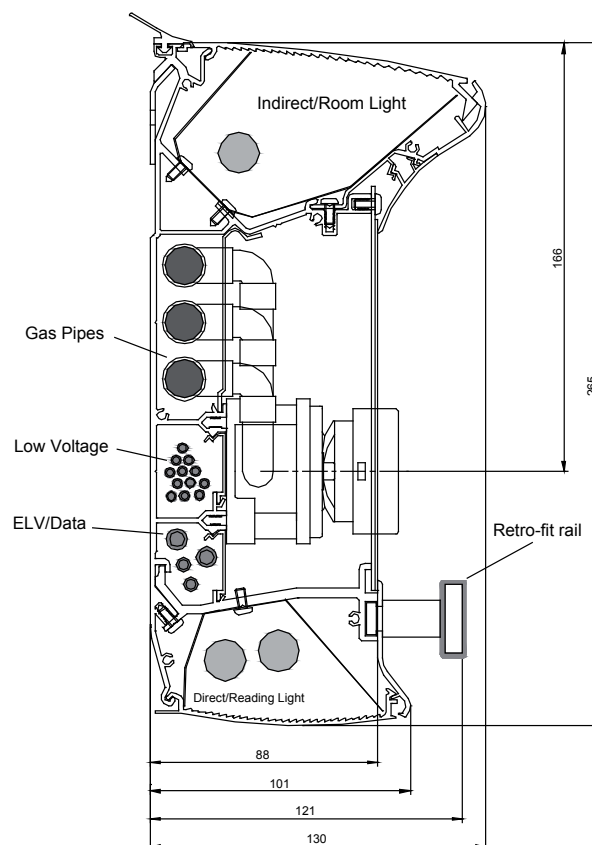
Communications

Provision for or fitting of the nursecall system shall be co-ordinated by the bedhead unit supplier. Data sockets, including, but not limited to RJ45 and telephone sockets shall be installed in the bedhead unit at the time of manufacture.

Medical Equipment Rail

Medical equipment rails shall be designed in accordance with BS EN 12218:1999, manufactured from a hollow rectangular stainless steel profile of 30mm high by 10mm deep. It shall be possible to retrofit further medical rails to the bedhead unit after installation without the need for power tools and without the need to disrupt the continuity of services provided by the bedhead unit.

Cross Sectional View





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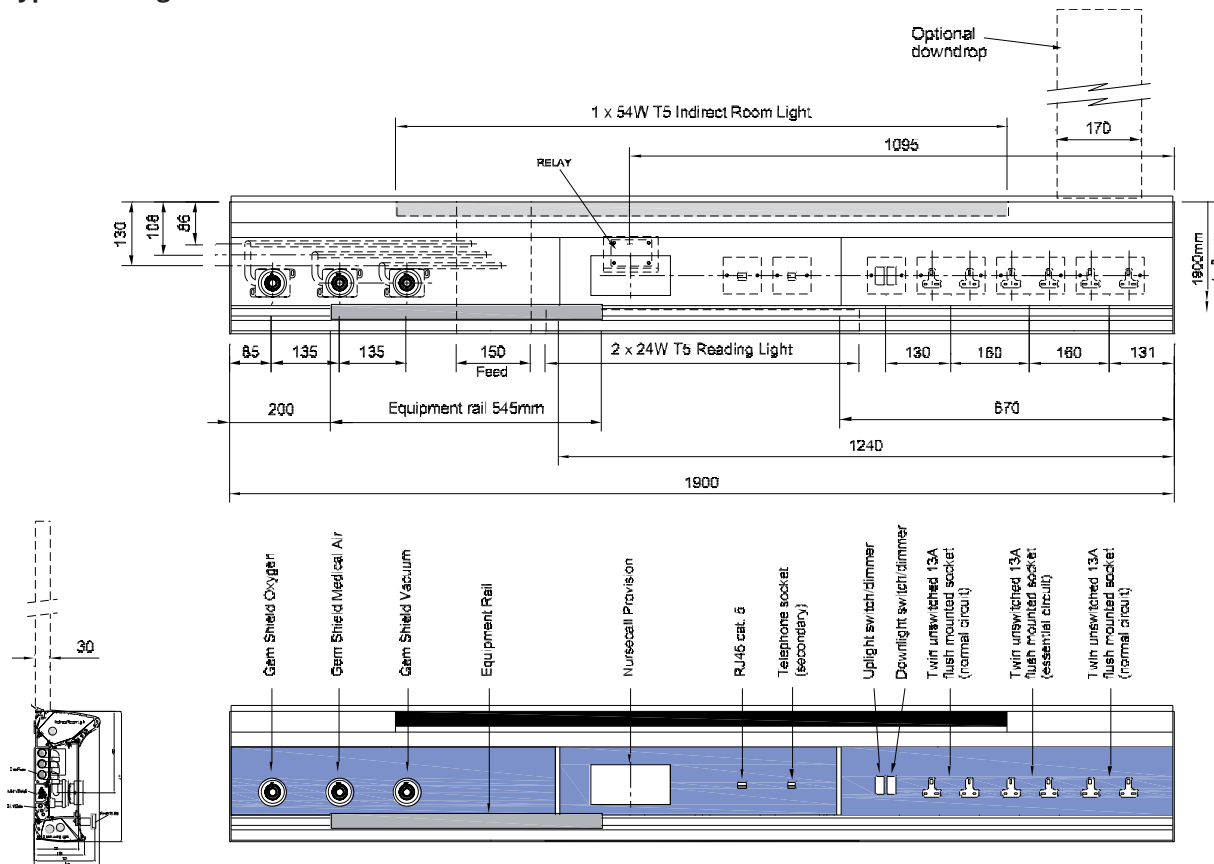
In an effort to continuously improve our products, the right is reserved to change the specification of the items described herein at any time. Please contact us for further information and up to date specifications.

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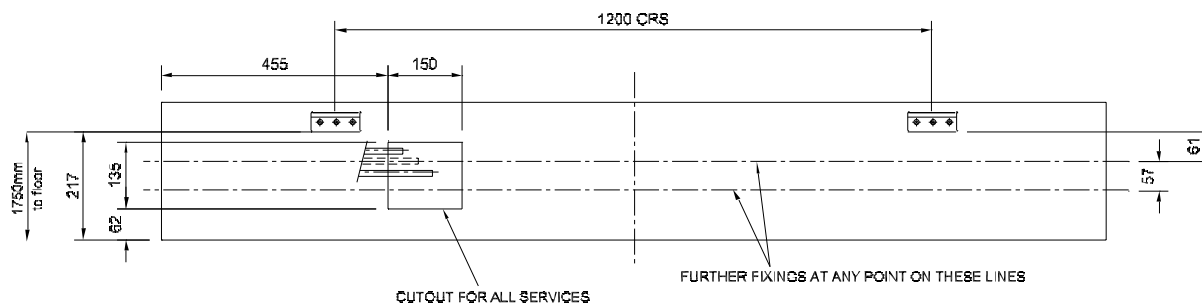
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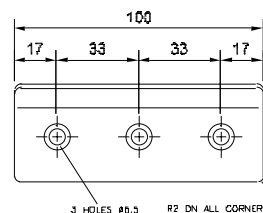
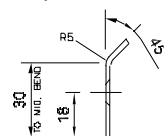
Typical Configuration



Installation Details



NOTES...
TOP PIPE IS OXYGEN (15mm O/D)
LOWER PIPE IS VACUUM (15mm O/D)



Colour Chart



RAL9010 - Pure White



RAL9001 - Cream



RAL7047 - Telegrey 4



RAL6019 - Pastel Green



RAL5024 - Pastel Blue



RAL3015 - Light Pink

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