

ADVANCING HEALTHCARE TECHNOLOGY



INSTALLATION INSTRUCTIONS



HU21 VERTICAL BEDHEAD SERVICE SYSTEM



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SECTION 1: SAFETY








Before unpacking and installing the equipment, carefully read these instructions.

Installation / commissioning, operation and servicing / maintenance of this equipment are to be carried out by suitably competent personnel only.

Do not use oil or grease on any of the gas terminal units or pipe-work for any reason as this could lead to a fire or an explosion. Use only approved oxygen compatible lubricants. If in any doubt, contact Hutz Medical Service Department. (Refer to Cover Page for Contact details)

Before carrying out any maintenance on the equipment, and before opening the access panels ensure that the electrical circuits have been de-energised and isolated, to avoid an electrical shock.

The following symbols apply to this product and are used in these instructions and on the product in question. The meaning of these symbols is as specified below:

	- Read instructions
	- Temperature range
	- Date of manufacture (Year/Month)
	- Alternating current
	- Protected earth connection
	- Type B applied part (EN 60601-1:1990)
	- Dangerous voltage

SECTION 2: DESCRIPTION

The HU21 vertical bed-head service system comprises of an extruded aluminium section which provides up to 240 volt electrical power as well as gas, vacuum and scavenger services if specified by the customer, from an external source through another device to the patient.

Certain other services can be provided for the direct use of the user or patient, such as internal lighting, nurse call, communication services and data services.

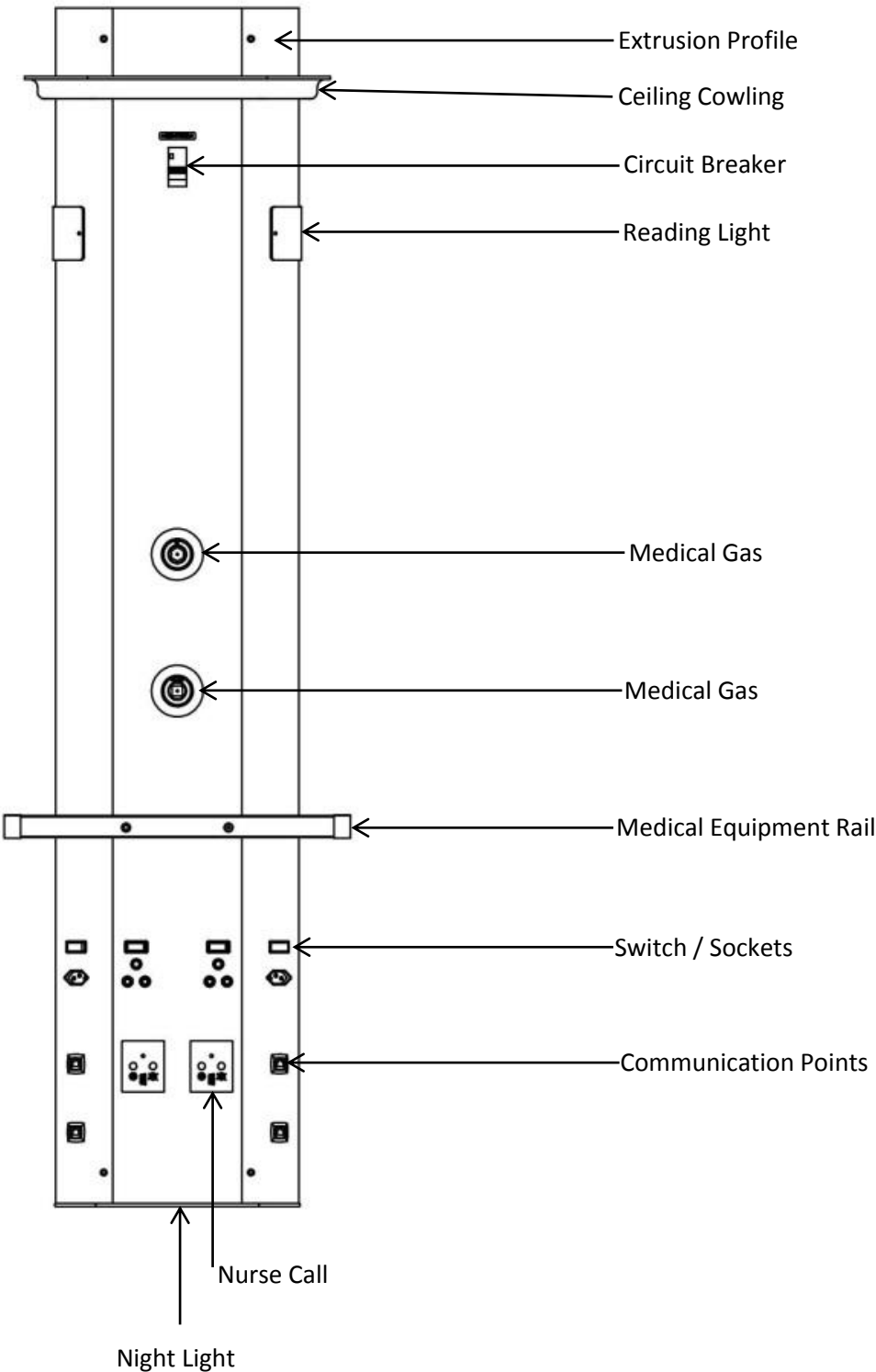
Access panels are provided for installation / maintenance / servicing purposes.

Where specified by the customer, a medical rail can be fitted, on which various attachments can be mounted.

SECTION 3: PRODUCT IDENTIFICATION

SUPPLY SERVICE: Ceiling Entry

HU21 2-BED UNIT

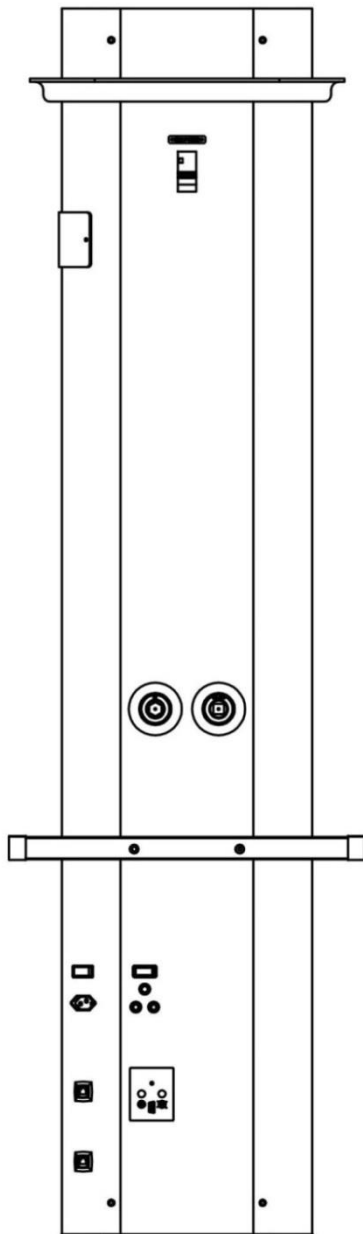


SECTION 3: PRODUCT IDENTIFICATION

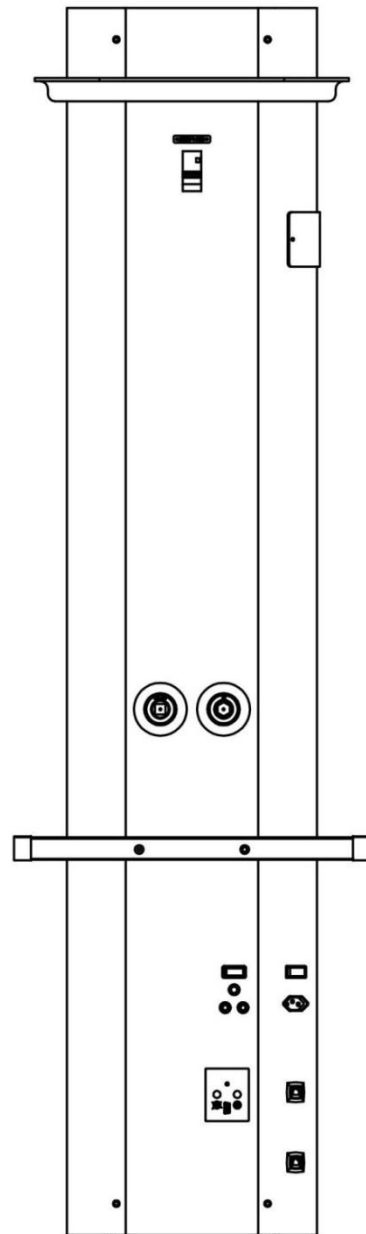
SUPPLY SERVICE: Ceiling Entry

HU21 1-BED UNIT

LEFT HAND UNIT



RIGHT HAND UNIT



For more information, refer to the product catalogue – obtainable from Hutz Medical Sales Department. (Refer to Cover Page for Contact Details)

SECTION 4: CLEANING AND MAINTENANCE

The equipment should always be kept clean. An alkaline cleaning agent with a pH range of 12 and 13 is recommended.

As the unit is not fully protected from ingress of liquid, only a slightly damp cleaning cloth should be used to avoid an electrical shock.

No special maintenance of the equipment required, other than to replace consumables.

A separate Service / Maintenance Manual issued on hand-over of the project.

Contact Hutz Medical Service Department if there are any queries relating to maintenance of the equipment. (Refer to Cover Page for Contact Details)

SECTION 5: PROTECTION AGAINST FLAMMABLE MIXTURES



Not protected – not suitable for use with flammable gases

SECTION 6: MODE OF OPERATION

Continuous, i.e. equipment may be left on indefinitely

SECTION 7: POWER SOURCE

Mains operated 110V / 130V, 220V / 240 V, 50 / 60 Hz alternating current.



Electrical connections are to be carried out by competent persons only

Protection against Shock

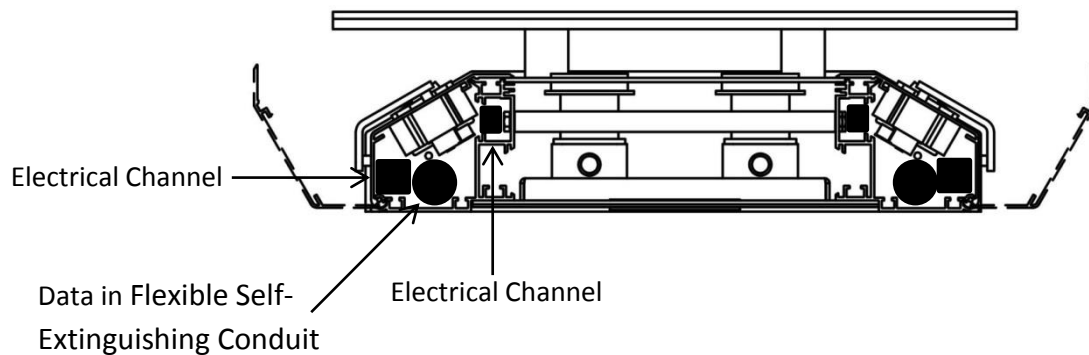
Class 1, Type B equipment (mains supplied equipment using a protected earth)

Wiring

The Wiring Legend is fixed to the inside of the unit.

Electromagnetic Interferences

In the event that data cables are required in the equipment, ensure that the data cables are fed through a flexible self-extinguishing conduit to shield the data cables from possible errors of electromagnetic interferences



SECTION 8: DISPOSAL

Used lamps are to be disposed of according to the applicable regulations of the region or country involved.

Any other materials should be disposed of in such a way that they can be re-cycled.

The equipment does not contain any hazardous substances.

SECTION 9: TRANSPORT, STORAGE AND OPERATING CONDITIONS

Ambient temperature: 0 - 40°C

Relative humidity (non-condensing): 10 – 95%

Atmospheric pressure: 70 – 110 kPa

SECTION 10: TOOLS REQUIRED

The following tools should be recommended for the HU10 unit installation:

- High Impact Drill
- Hammer
- Rubber Mallet
- Chalk Line
- Spirit Level
- Tape Measure
- Ø6.0 Masonry Drill (for concrete wall mount)
- Ø4.0 HS Drill (for dry-wall mounting; using a Coach Screw)
- Ø16.0 HS Drill (for dry-wall mounting; using a Butterfly Screw)
- Ø8.0 HS Drill (for drilling holes into ceiling)
- Star Screwdriver / Cordless Drill with Star End Bit
- 1.5mm Hex Key (where units are joined)
- 10mm Open End / Ring Spanner (where units are joined)
- 3mm Hex Key (where a riser is fitted)
- 4mm Hex Key (where Medial Rails are fitted)
- Torque Wrench 9Nm with 4mm Hex Key End Bit

SECTION 11: PRE-INSTALLATION

11.1 Remove the HU21 from all the packing and place the unit on a flat surface or table. The packaging is to be discarded for recycling purposes according to respective National Environmental Regulations.

11.2 The following components are included with the HU21 Unit:

- 11.2.1 2.5mm Hex Key (taped to the back of the unit)
- 11.2.2 Medical Rail (if Medical Rail is supplied) *
- 11.2.3 Medical Rail Spacers (if Medical Rail is supplied) *
- 11.2.4 M6 x 55 Countersunk screws (if Medical Rail is supplied) *
- 11.2.5 M6 x 60 Impact Anchor (suitable for solid brick or concrete walls only) *
- 11.2.6 M6 x 80 Butterfly Screw (suitable for Dry Walls only) *
- 11.2.7 M6 Oversize Washer (used with the M6 x 80 Butterfly Screw)
- 11.2.8 Ø6 x 50 Coach Screw (suitable for Wood Beams only) *
- 11.2.9 Ceiling Cowling
- 11.2.10 No.: 4 x 45 Pozi-drive Screws - 3-off
- 11.2.11 Flexi Anchors - 3-off
- 11.2.12 White Plastic Screw Head Covers - 3-off

Note: Quantity supplied according to the unit length.

*** Pre-packed items are accessible from the rear side of the unit.**

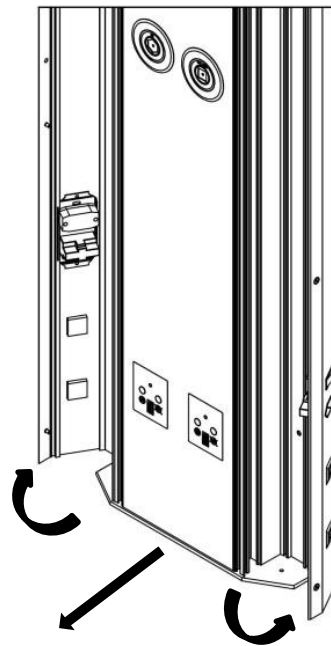
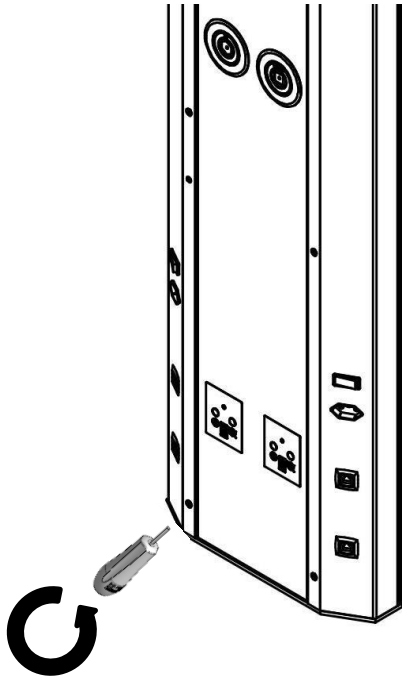


If any of the above mentioned items have not been packed with the unit or any items have been damaged, contact HUTZ Medical immediately. (Refer to Cover Page for contact details)

Additional Components may be included on customer request.

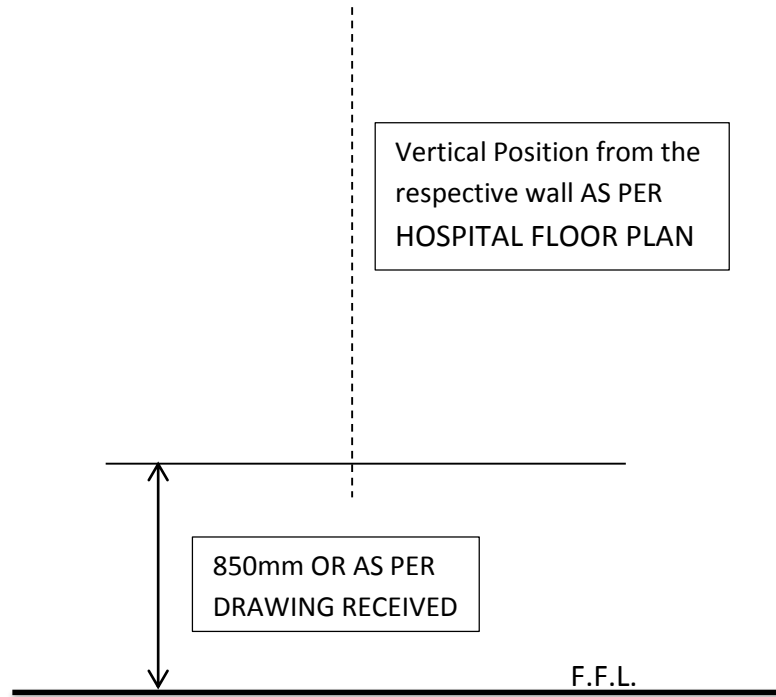
SECTION 11: PRE-INSTALLATION (cont.)

- 11.3 Refer to the Hospital Floor Plan (Obtainable from the main contractor or Architect) to ensure that the correct Area and / or Room number corresponds with the identification label on the unit and confirm that the HU21 Unit length corresponds to the HUTZ Medical drawing supplied.
- 11.4 Use the Allen Key provided (Refer to # 11.2.1) to loosen the side lid screws and rotate the lids outwards, as illustrated below, to free the fascia. Place the fascia in a safe place to prevent any damage while installing the unit on the wall.

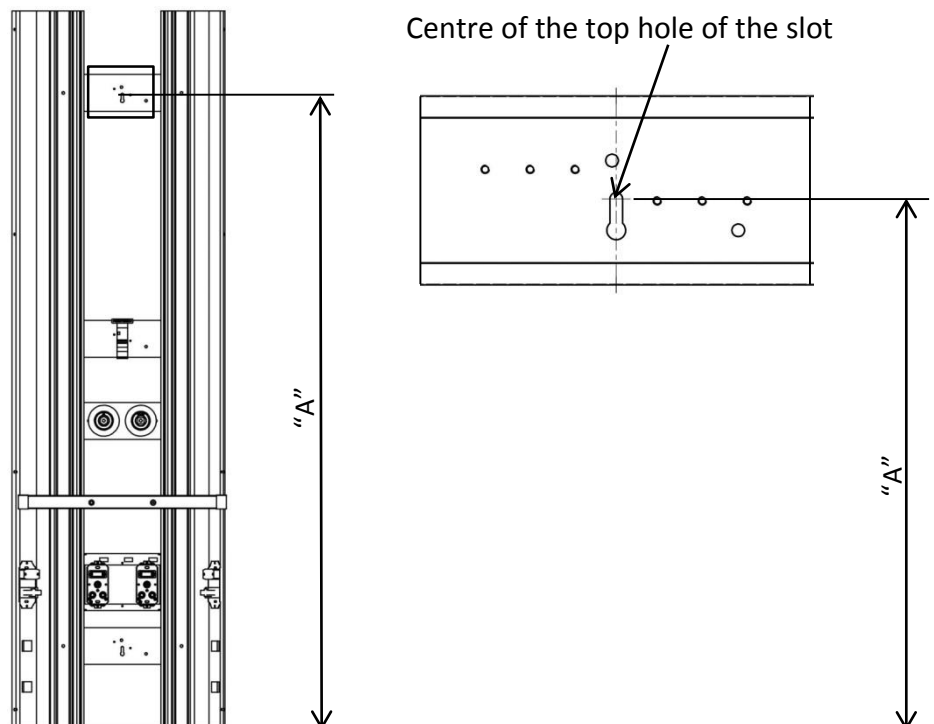


SECTION 12: MARKING OFF INSTRUCTIONS

- 12.1 Using a measuring tape, mark off the vertical position between the respective walls to indicate the centre of the HU21 Unit. Refer to the Hospital Floor Plan. (Obtainable from the main contractor or Architect) Mark off the vertical position line with a spirit level.

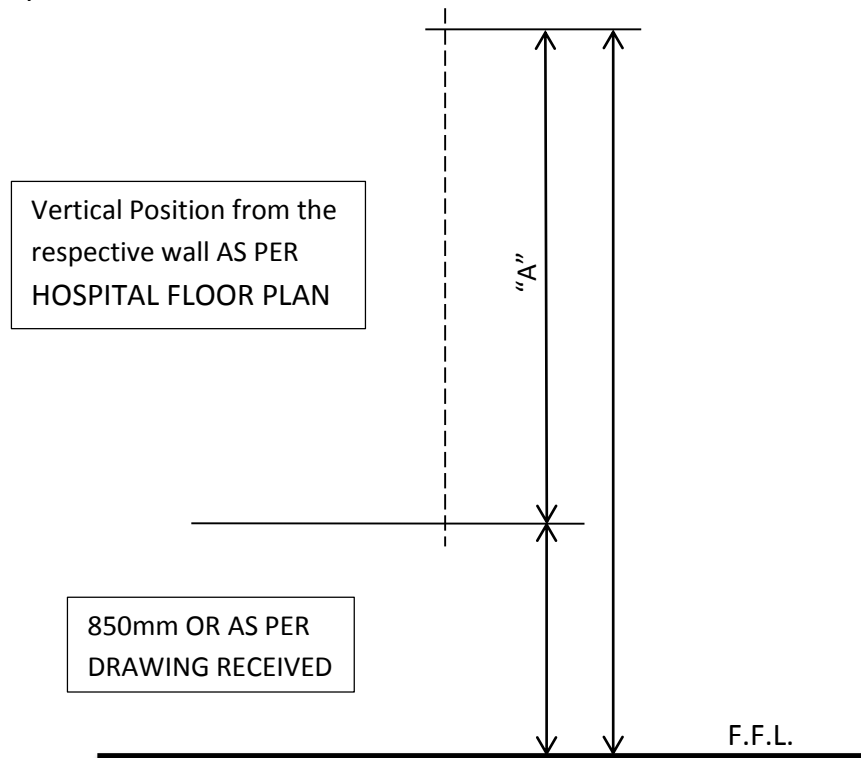


- 12.2 Measure the dimension "A" on the HU21 Unit from the bottom of the End Plate to the centre of the top hole, of the slot.



SECTION 12: MARKING OFF INSTRUCTIONS (cont.)

- 12.3 Add the dimension "A" to the height of the HU21 Unit from the Finished Floor Level (F.F.L.) or as specified on the HUTZ Medical drawings issued upon delivery. i.e. Dimension "A" + 850mm or as specified on the HUTZ Medical drawings issued upon delivery.



SECTION 13: FITMENT OF HU21 INTO POSITION

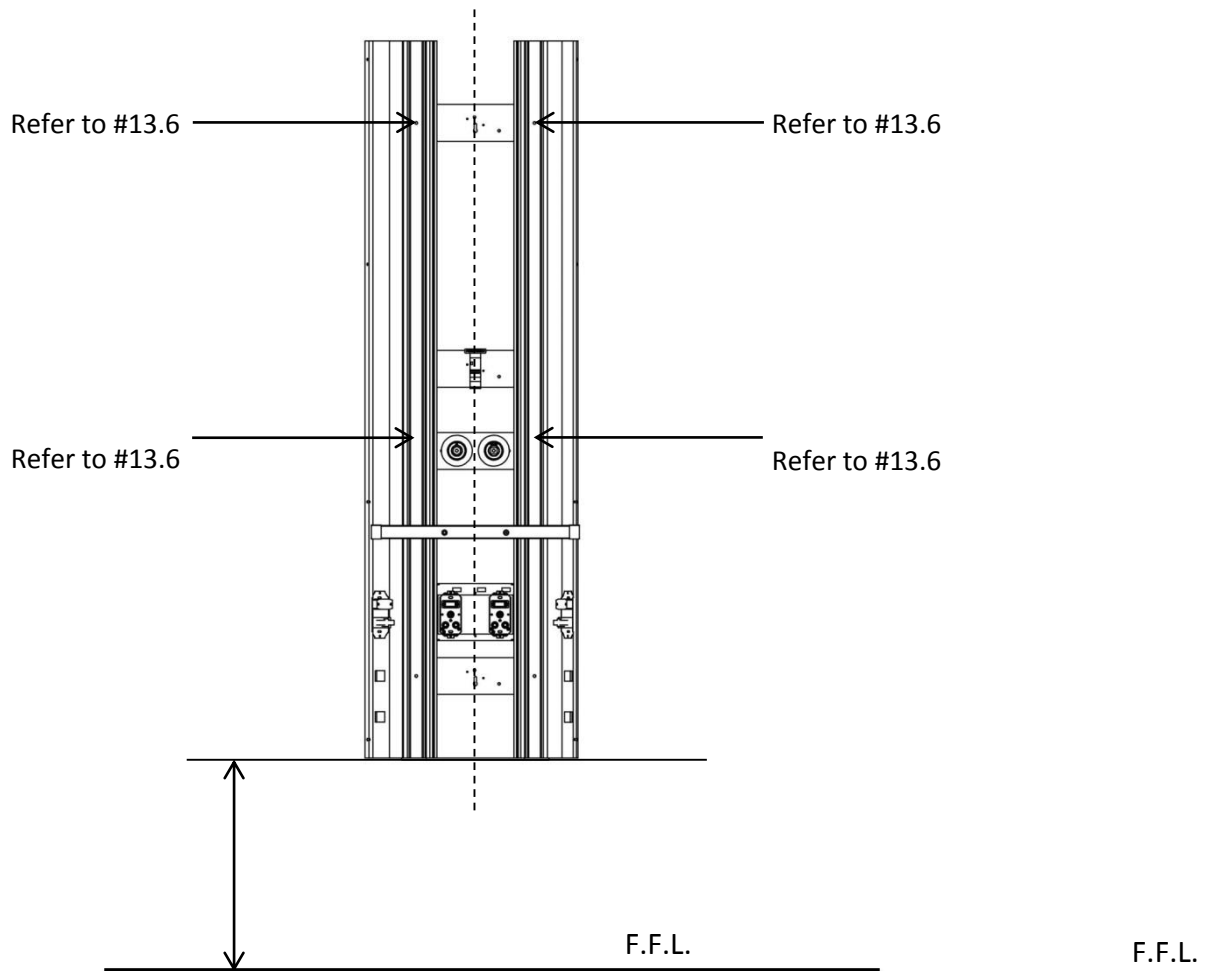
- 13.1 Drill the required hole for the appropriate anchor to a minimum depth of 70mm. (solid brick or concrete walls) or through dry walls, as applicable. The following fasteners are to be used for the different types of applications:

Note: M6 x 60 Impact Anchor - for solid brick or concrete walls only

M6 x 80 Butterfly Screw and M6 Oversize Washer - for Dry Walls only

Ø6 x 50 Coach Screw - for Wood Beams

- 13.2 Knock in the respective anchor into the drilled hole and ensure that the anchor is left protruding 10mm from the wall.
- 13.3 Hang the HU21 unit on the single appropriate anchor.
- 13.4 Check the vertical position of the HU21 unit with a spirit level.
- 13.5 Mark out the 4-off pre-drilled holes in the lid cavity area and repeat #13.1 to secure the HU21 Unit onto the wall.



- 13.6 Knock in the respective anchors into the drilled holes and ensure the HU21 Unit is secure on the wall.

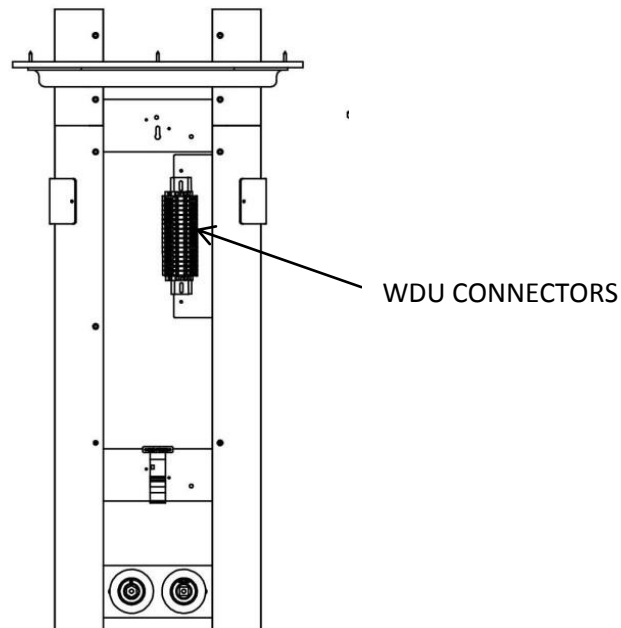
SECTION 14: INSTALLATION OF SERVICES




All electrical installations are to be performed by competent persons

14.1. **Electrical**

14.1.1. Electrical terminations are made directly to the WDU Connectors situated behind the fascia as illustrated below.



14.1.2. Refer to the Wiring Legend as per specimen below which is fixed to the back of the fascia which indicates the circuit/s allocated to the respective WDU Connectors.

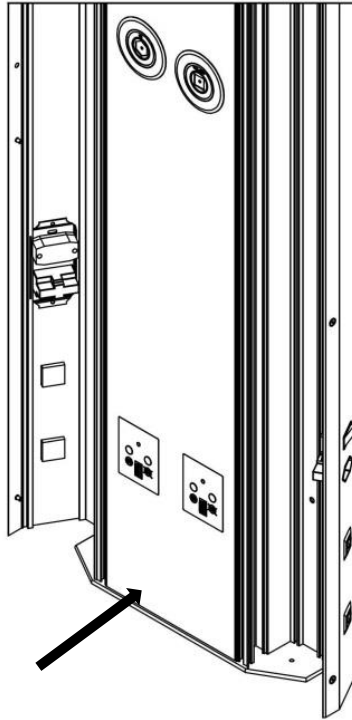
	WIRING LEGEND	Drawing No.:
Job No:	Project:	Date:

14.1.3. Connect the electrical wires to the respective circuits as indicated on the WDU Connectors as indicated on the Wiring Legend.

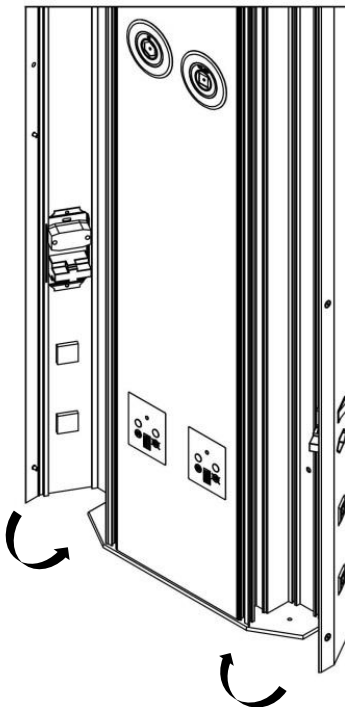
14.1.4. Ensure that the inside of the left and right hand lid channels and fascia area are dust free on the wall and cleaned out before replacing the fascia.

SECTION 14: INSTALLATION OF SERVICES (cont.)

- 14.1.5. When replacing the fascia, place the fascia over the services carefully, enabling them to protrude through the cut-outs provided.



- 14.1.6. Close the left and right hand lid by rotating the lids inward, as illustrated below and tighten the lid screws; using the 2.5mm Hexagon Allen Key provided.



SECTION 14: INSTALLATION OF SERVICES (cont.)

14.2. Gas Installation



Gas connection and testing to be carried out by certified gas installer

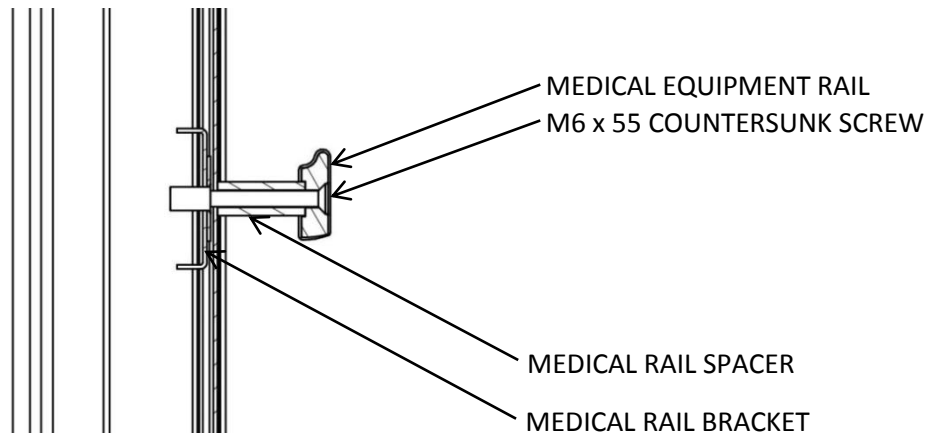


Cross-connection of medical gas pipelines could prove fatal

- 14.2.1. Where specified, the equipment is fitted with medical grade copper pipe conforming to BS EN 1412.
- 14.2.2. Recommended copper to copper on-site jointing process: Silver / copper / phosphorus brazing alloy type CP1 or CP04 to BS 1845 (or equivalent) using a clean, dry, oil and oxygen free nitrogen inert gas shield with no flux.
- 14.2.3. Ensure that the medical gas pipe system is bonded to the earth system.
- 14.2.4. The gas terminal units and pipeline system in the unit have been fully factory leak tested. After connection to the mains supply, the entire medical gas pipeline system is to be tested to BS-EN-ISO 7396 before being commissioned for use. Refer any queries to Hutz Medical Service Department. (Refer to Cover Page for Contact Details)

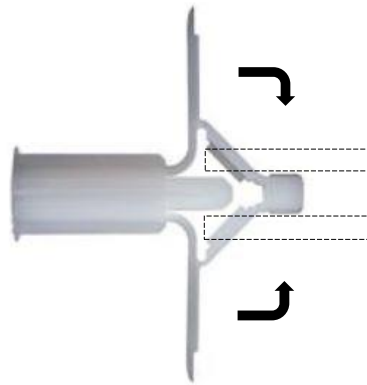
SECTION 15: MEDICAL EQUIPMENT RAIL FITMENT

- 15.1 Secure the Medical Equipment Rail/s, if provided, onto the unit by inserting the Countersunk Screws provided, (Refer to # 11.1.4) through the Medical Equipment Rail and the Spacer respectively, (Refer to # 11.1.2 and # 11.2.3). Use a 4mm Hexagon Allen Key to tighten the Countersunk Screws through the fascia into the Medical Rail Bracket, behind the fascia. Torque the Countersunk Screws to 9Nm.

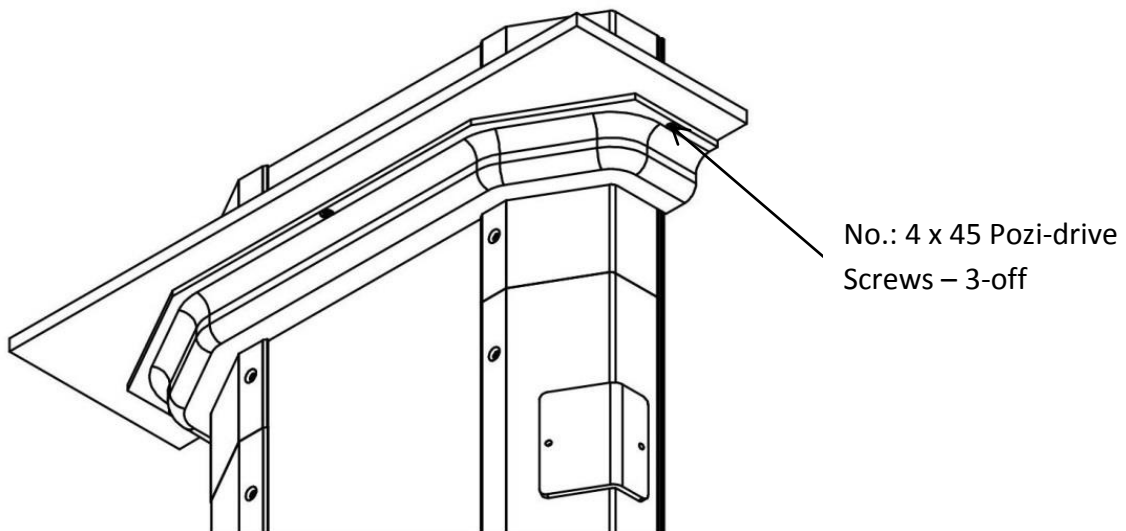


SECTION 16: COWLING INSTALLATION

- 16.1 Ensure the HU21 unit is secured on the wall.
- 16.2 Fit the cowling around the unit and press-up against the ceiling. (Refer to # 11.1.9)
- 16.3 Mark the fixing hole positions on the ceiling board through the 3x pre-drilled holes in the cowling by using a $\varnothing 4.5\text{mm}$ drill.
- 16.4 Drill a $\varnothing 10\text{mm}$ hole through the marked off holes.
- 16.5 Before inserting the Flexi Anchors provided (Refer to # 11.1.11) into the $\varnothing 10\text{mm}$ holes, pinch the wings flat in the direction of the arrows as illustrated below and insert them sufficiently deep enough to allow the wings to be released.



- 16.6 To check that the Flexi Anchor wings are released turn a Dry-Wall Screw (Refer to # 11.1.10) by hand into the Flexi Anchor and try and pull on it.
- 16.7 Fit the cowling around the unit, press-up against the ceiling and secure by using the Dry-wall Screws provided (Refer to # 11.1.10) into the Flexi Anchors.
- 16.8 Insert and press the White Screw Head Covers provided over the Dry-wall Screws. (Refer to # 11.1.12)



NOTES

Handwritten notes area with horizontal lines.