**MIRAGE** basic unit shall be manufactured by Hospital Systems Inc., Pittsburg CA 94565 USA, in accordance with shop drawings and documents. The following is a general specification, and components listed may not be present or required in final product.

The MIRAGE is listed by Underwriters Laboratories Inc. (UL) in Canada and the United States of America. This product also complies with the seismic requirements of, and is approved by, the State of California's Office of Statewide Health Planning and Development (OSPHD). HSI manufactures all products in accordance with the National Fire Protection Association (NFPA), NFPA-99 (current edition) and National Electric Code (NEC).

The installation contractor is responsible for compliance with all local, state, and federal codes applicable to the installation of medical gas and electrical systems.

**1. Submittals and Approvals**

Job specific shop drawings shall be produced for each project. These shop drawings will clearly indicate the area of Medical Gas termination, and electrical connection points inside or outside the MIRAGE. Drawings of Record will be produced, and emailed at the time of shipment, upon request.

HSI will manufacture equipment as per signed approval drawings and verification documents, which are provided in the job specific submittal package.

**2. Basic Construction**

MIRAGE shall be constructed of plywood and Spectrum Duracore™ finished with high impact plastic laminate to provide a surface-mounted cabinetry unit. Unit may also be constructed of solid, stained hardwood. Unit shall include hinged or pocket doors to conceal services. Unit shall be factory assembled to include mechanical and electrical components as shown on the plans and specifications, and wired in accordance with HSI shop drawings. Anodized aluminum internal fascias shall be removable for access to individual components mounted within the console sections of the MIRAGE. Device cover plates shall be constructed of clear anodized aluminum. Primary electrical conduit runs to the wall unit are provided by the electrical contractor and shall be accommodated by a terminal enclosure furnished as an integral part of the MIRAGE. All secondary wiring within the MIRAGE shall be enclosed in fixed wiring, and terminate in the terminal enclosure. All wiring shall be marked, color-coded and tie wrapped to facilitate easy circuit identification. Spectrum Duracore™ fire-retardant panels shall be finished with high-pressure plastic laminate on the outside face and a fire retardant backing sheet on the reverse. The color of the laminate shall be selected by the hospital or architect from HSI standard colors.

**3. Components**

**A. Electrical**

**INTERNAL GROUND BUS**

A ground bus shall be included.
3. Components Cont.

ELECTRICAL RECEPTACLES
Receptacles shall be the type and quantity as shown on the drawings and specified. Unless otherwise noted 2 pole, 3 wire, rated at 20 amps, 120 Volt, Hospital Grade shall be provided. Also available: BS, DIN, and others.

- **Duplex receptacles** shall be NEMA style 5-15R or 5-20R, color Ivory for use on normal power circuits, and color Red for use on critical branch power circuits.
- **Simplex receptacles** shall be NEMA style 5-15R or 5-20R, color Ivory for use on normal power circuits, and color Red for use on critical branch power circuits.
- **Safety receptacles** (if required) shall be duplex type, be NEMA style 5-15R or 5-20R, color Ivory for use on normal power circuits, and color Red for use on critical branch power circuits. Receptacles shall limit proper access to energized contacts.

GROUNDING JACKS
Externally accessible grounding jacks shall be provided in the MIRAGE unit as shown in these shop drawings. The solid brass receptacle shall be enclosed in a non-conductive housing and shall be spring loaded, with a twist-to-lock action and shall be manufactured to the requirements of NEC article 517, and NFPA 99.

SWITCHING
Switches shall be Industrial Grade 120/277 volt, 15 or 20 amps. Switch type options include SPST, 3-Way or Momentary, and shall be provided as shown on submittal shop drawings. Low Voltage Switching will be 0-12 volts, 15 amps unless otherwise noted. HSI shall furnish, pre-install and wire all switches.

REACT™ CLOCK TIMER
When indicated on the drawings, a HSI React Clock Timer shall be provided and factory installed in the MIRAGE wall unit. The circuitry shall allow the activation of the elapsed time indicator by manually depressing the "Start" switch, or by a patient ventricular alarm condition broadcast through the bedside physiological monitor. Manually operated "Stop/Start", "Reset", and "Mode" switches are also provided and pre-wired within the React unit. The installing contractor shall perform wiring and electrical actuation between the monitor and the React unit.

B. Med Gas
MEDICAL GAS PIPING
Oxygen, vacuum, medical air, evacuation, and nitrous oxide outlets shall be as indicated in plans and specifications. All outlets will be installed by HSI at the factory, manifolded and tested in accordance with NFPA 99c. All Medical Gas piping shall be Type L copper pipe. The mechanical contractor will bring the primary supply lines of the medical gases to the singular terminal connections at locations shown on the drawings.
3. Components Cont.

C. Lighting (Optional)

**HORIZON-8™ LIGHTING FIXTURE**
When indicated on the drawings, the overbed lighting fixture shall be provided complete with plastic laminate trim color to match the WEDGE NEONATAL unit. Lamps provided by others.

**AURORA™ LIGHTING FIXTURE**
When indicated on the drawings, the overbed safety lighting fixture shall be provided. Lamps are provided by others.

**AMADEA LIGHTING FIXTURE**
When indicated on the drawings, the high end overbed lighting fixture shall be provided. Lamps are provided by others.

**MULTI-FUNCTION CEILING LIGHT**
When indicated on the drawings, a ceiling mounted multi-function lighting fixture shall be provided. Lamps are provided by others.

D. Provisions

**NURSE CALL EQUIPMENT**
All nurse call equipment shall be furnished and installed by others as indicated in the plans and specifications. A labeled pull-cord shall be provided by HSI for use by the nurse call installer.

**MONITORING EQUIPMENT**
Monitor equipment shall be provided and installed by others. HSI shall provide a matching blank plate for the monitor receptacle to the monitor supplier when requested. The MIRAGE unit will include a factory installed raceway and labeled pull cord to accommodate the monitor wiring. Where specified a monitor slide and optional pivot/tilt arm shall be provided to support the physiological monitor.

**COMPUTER INTERCONNECT**
A computer system furnished by others shall be installed at locations as shown on the plans and specifications. HSI shall provide a matching blankplate for the computer jack when requested. The MIRAGE unit will include a factory installed raceway and labeled pull cord to accommodate the computer system wiring.

4. Installation

HSI shall supply a rough-in bracket with knockouts for building service connections. Rough in bracket will be supplied in advance of headwall units for pre-installation of electrical and medical gas services and shall be furnished with instructions. Hardware is to be furnished by the installer or contractor. The installer or contractor shall install rough in bracket, mount headwall to wall, remove service panel of headwall module, and make primary gas and electrical connections. Hardware to mount the headwall shall be provided by the installing contractor to meet local requirements.
4. Installation Cont.
Instructions shall be furnished by HSI The installer or contractor shall furnish and install conduit to ceiling mounting plate with wiring. He shall make connection of building services to terminal compartment as shown on the electrical drawings and as herein specified. Customer shall coordinate with Hospital Systems, Inc for equipment supplied by others to ensure compatibility of this equipment with the headwall. The installer or contractor shall provide primary connections to the medical gas system in the access area of headwall unit as detailed on drawings. It shall be the responsibility of the mechanical contractor to perform and certify all pressure tests as required by NFPA 99c, and to install the gas outlet finishing assemblies. Please refer to the installation instructions for further details.

5. Ordering Information
All HSI headwalls are Build-to-Order and will be assigned their own unique model numbers during the submittal phase.

Please visit our website at www.HSIheadwalls.com for the contact information of your local sales representative.